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TITLE: Characterization of Human Torso Vascular Morphometry in  
Normotensive and Hypotensive Trauma Patients

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14. ABSTRACT Non-compressible torso hemorrhage remains the leading cause of preventable death on the battlefield and a leading cause of death in civilian centers. The purpose of this project is to provide basic morphometric understanding of aortic and vena caval anatomy as it relates to the rest of the body with the goal of enabling the use of various occlusion catheters that can control bleeding in non-compressible torso injuries in the field. One year into the project, we have identified and processed the base morphometrics and much of the aortic and vena caval measurements for the 2000 civilian CT scans. Additionally, we have developed a machine-learning algorithm for aortic identification that will speed processing and reduce inter- and intra-user variability. Regarding the military scans, we have secured HRPO IRB approval and are actively working on a process for receiving military CT scans. Finally, we have begun planning our data analysis and have executed pilot assessments to validate the approach.					
15. SUBJECT TERMS Trauma, Endovascular, Thoracic, Abdominal, Aorta, Morphometry					
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## **1. INTRODUCTION:**

Our research group has developed advanced technical capabilities to quantitatively measure anatomic characteristics in traumatically injured patients. In a previous DOD study, we noted clear differences between men (n=400) and women (n=170). We also noted significant racial differences in the correlation between body habitus and aortic dimensions as well as differences with age and body habitus. We hypothesize that aortic and venous dimensions differ with the hemodynamic status of the injured person as well as their gender, race, body habitus and age. Better characterization of *these differences* is necessary to guide optimal field inflation of occlusive balloon catheters or other hemorrhage control devices for the treatment of battlefield casualties; and better characterization of *the corresponding dimensions* will support the development of occlusion devices that optimally limit hemorrhage while minimizing complications. Specifically, we aim to develop accurate measurements for aortic and vena caval dimensions based on hemodynamic status, body habitus, gender and age in the civilian population; and subsequently we will translate these findings to the military population and create accurate nomograms for catheter design, catheter insertion and balloon inflation based on hemodynamic status, body habitus, gender and age.

## **2. KEYWORDS:**

Provide a brief list of keywords (limit to 20 words).

- Trauma
- Endovascular
- Thoracic
- Abdominal
- Aorta
- Morphometry
- Vena Cava
- Machine Learning
- Hemorrhage
- Catheter
- Hypotension
- Balloon Occlusion

## **3. OVERALL PROJECT SUMMARY:**

### **1.1.1: Identify 2000 Civilian CTs (06/30/14-10/30/14)**

- Current Objectives:  
The goal for this task is to identify CT scans from 2000 civilians between the ages of 18 and 50 from which we will extract aorta and vena cava measurements of length and dimension, as well as muscle, fat, bone, and organ morphomic measures and hemodynamic status (BP and HR).



- **Results, Progress and Accomplishments (with Discussion):**  
This task is complete. We have identified 2000+ civilian CTs from the University of Michigan trauma registry that meet these criteria.
- **Key Methodology:**  
Using the PGAdmin query tool, we married the data from the UM trauma registry with the UM radiology database to identify patients who were transported to the ED for a traumatic injury or admitted the UMHS and who received a CT scan for clinical purposes.
- **Data:**  
See APPENDIX A: Civilian Patient List (PDF)

### **1.3 Develop Aorta Algorithm (06/30/14-10/30/14)**

- **Current Objectives:**  
Segment the full aorta from the arch to the bifurcation points, and then post-process with MATLAB® to identify the multiple critical vessel branch-points for diameter and length measurements.
- **Results, Progress and Accomplishments (with Discussion):**  
The algorithms for the automatic segmentation of the aorta have been developed and meet our target accuracy measures (currently we are achieving an average 90% accuracy rate with our fully-automated machine learning approach). This method has greatly improved the throughput and provided a level of consistency that overcomes any inter- and intra-user variability.
- **Key Methodology:**  
Using a novel approach for identifying and capturing morphomic data from CT scans, we have developed a machine learning technique for extracting the aortic structures in a more automated fashion. This entails creating algorithms that search for circular structures in a region of interest and then reference the slices above and below to validate the selection. Once the main aortic structure is identified, we lay in a centerline and use a post-processing, user-guided algorithm developed in MATLAB® to mark femoral head cut point (left and right), iliac (left and right), bifurcation point, renal arteries (left and right), superior mesenteric, celiac (inferior and superior), and left subclavian artery. Following this identification step, measurements of diameter and lengths (total and between the branch points) are stored in the database.
- **Data:**  
See Appendix B: Vascular Processing Videos (Powerpoint)
- See also Appendix G: Machine Learning

**1.1.2: Identify 50 EKG-gated CTs (11/03/14-12/12/14)**

- **Current Objectives:**  
To determine the normal change in aortic/vena caval geometry and dimensions at different locations during the cardiac cycle, we are also analyzing a cohort (n=50) of subjects who have undergone EKG-gated CT scans to determine the change in aortic geometry and dimensions at different aortic locations during the cardiac cycle. Hemodynamic data is available for these patients from the time of CT scanning. This information will be essential for optimal design of catheter balloons that have the appropriate mechanical properties to occlude flow without causing aortic rupture or dissection at different stages of the cardiac cycle.
- **Results, Progress and Accomplishments (with Discussion):**  
We have successfully identified this subset of patients. This task is complete.
- **Key Methodology:**  
To identify these patients we used the PGAdmin query tool find patients in the trauma population who underwent an ECG-gated CT scan. Once selected, downloaded, and de-identified, these scans are then separated into the multiple cardiac phases to enable our algorithms to process each stage individually. Once this is complete, we run each phase through our automated and post-processing steps.
- **Data:**  
See Appendix A: Civilian Patient List (PDF)

**1.1.3: Identify 75 Internal Injury & Hypotensive CTs (11/03/14-01/02/15)**

- **Current Objectives:**  
To determine the effect of internal hemorrhage and hypovolemia on aortic/vena caval dimensions and geometry, we are analyzing an additional cohort of civilian trauma patients with significant internal hemorrhage and with/without hemodynamic instability (n=75). Comparing patients with arterial versus venous bleeding (as determined by active contrast extravasation) as well as differing locations of hemorrhage (chest, abdomen, pelvis). In the past, it was extremely rare to scan a hypotensive trauma patient as they were rushed to the OR. However, with the recent widespread adoption of ultrasound to rule out pericardial, pleural, and abdominal fluid in combination with continued use of chest and pelvis radiographs to rule out significant thoracic and pelvic hemorrhage, more and more hypotensive blunt trauma patients (primarily from high energy motor vehicle crashes) are undergoing CT scanning with continued resuscitation to define their internal injuries rather than proceeding to the OR for blind surgical exploration. It is this population that provided the 75 scans needed for this task.
- **Results, Progress and Accomplishments (with Discussion):**  
We have successfully identified this subset of patients. This task is complete.

- **Key Methodology:**  
To identify these patients we used the PGAdmin query tool find patients in the trauma population with internal hemorrhage and hypovolemia. Once selected, downloaded, and de-identified, we will determine whether the patient had arterial versus venous bleeding (as determined by active contrast extravasation) as well as the differing locations of hemorrhage (chest, abdomen, pelvis).
- **Data:**  
See Appendix A: Civilian Patient List (PDF)

#### **1.4: Develop Vena Cava Algorithm (09/01/14-02/13/15)**

- **Current Objectives:**  
Better characterization of the differences in vena caval dimensions and lengths is necessary to guide optimal field inflation of occlusive balloon catheters or other hemorrhage control devices for the treatment of battlefield casualties. Better characterization of these dimensions will support the development of occlusion devices that optimally limit hemorrhage while minimizing complications.
- **Results, Progress and Accomplishments (with Discussion):**  
We have developed a user-guided algorithm to process the vena cava.
- **Key Methodology:**  
We have begun manual segmentation of Vena Cava of civilian patients. This process involves placing points on the interior of the vena cava and then using a “growing” algorithm to find the edges. We attempted development of a more automated process but the variation of the vena cava dimension and shape resulted an algorithm that was not accurate enough to make the process useful.
- **Data:**  
See Appendix B: Vascular Processing Videos (Powerpoint)

#### **1.2: Capture Civilian Demographics (11/03/14-03/06/15)**

- **Current Objectives:**  
To identify the variability in aortic and vena caval dimensions without the need for 3-D imaging in the field. Our objective is to develop nomograms that take into account age, sex, race, weight, and height, as well as external measurements that we can extrapolate for our base morphometrics measurements.
- **Results, Progress and Accomplishments (with Discussion):**  
We have identified all demographics of our civilian population that are possible. This task is complete.
- **Key Methodology:**  
We leveraged the UM trauma registry and the electronic medical records system at UMHS to extract the demographics data on our selected civilian patient

population. Using the PGAdmin query tool, we extracted age, sex, race (when available), blood pressure, and heart rate for each patient from our identified group (transported to the ED for a traumatic injury or admitted the UMHS and who received a CT scan for clinical purposes).

- Data:  
See Appendix A: Civilian Patient List (PDF)

### **1.5: Process Base Morphomics for Civilian Population (09/01/14-03/27/15)**

- Current Objectives:  
We will use our base morphomic measurements in body circumference, fat, muscle, bone, organs, etc. to record measurement of body habitus for the civilian trauma population. These data will then be connected with demographics and vasculature measures to feed our development of nomograms for vasculature.
- Results, Progress and Accomplishments (with Discussion):  
All base morphomics have been processed for the civilian scans we have identified. This task is complete.
- Key Methodology:  
Morphomics is based on highly automated, high-throughput image processing to quantify anatomically-indexed measures from a single patient's scan, offering remarkable opportunities for personalized treatment. Each patient's individual morphometric qualities are then assessed against population-based standards to identify patient-specific risk factors. Morphomic assessment of trunk musculature (density and mass), spine, psoas (area and quality), fascia, skin, fat, body circumference and eccentricity, dorsal muscle group, bone mineral density, and solid organ morphomic measures have demonstrated that these patient-specific variables dominate risk prediction models using proven techniques for the UM Morphomic Analysis Group.
- Data:  
See Appendix C: Morphomics Overview (PDF)

### **1.6: Process Aorta for Civilian Population (09/22/14-10/02/15)**

- Current Objectives:  
To determine a baseline for our nomogram development, we are leveraging our custom algorithm to extract length and diameter measurements as well as branch point locations for 2000 civilian CTs.
- Results, Progress and Accomplishments (with Discussion):  
We have processed 959 aortas from 2000 normotensive civilian CTs thus far. Now that we have developed and tested a reliable machine-learning based automatic processing method, the completion of this task will be completed on time.

- **Key Methodology:**

Using a novel approach for identifying and capturing morphomic data from CT scans, we have developed a machine learning technique for extracting the aortic structures in a more automated fashion. This entails creating algorithms that search for circular structures in a region of interest and then reference the slices above and below to validate the selection. Once the main aortic structure is identified, we lay in a centerline and measure the radius. Then, using a post-processing, user-guided algorithm developed in MATLAB®, we mark the femoral head cut point (left and right), iliac (left and right), bifurcation point, renal arteries (left and right), superior mesenteric, celiac (inferior and superior), and left subclavian artery. Following this identification step, measurements of diameter and lengths (total and between the branch points) are stored in the database.

- **Data:**

<i>AORTA</i>	<i>Centerline</i>	<i>Radii</i>	<i>Landmarks</i>	<i>Full Volumes</i>
Normotensive	959	959	280	280
Hypotensive	63	63	14	14

### 1.7: Process Vena Cava for Civilian Population (01/05/15-01/15/16)

- **Current Objectives:**

To determine a baseline for our nomogram development, we are leveraging our custom algorithm to extract length as well as minor and major diameter measurements, branch point locations, and volume for a 5 cm section of the vena cava for 2000 civilian CTs.

- **Results, Progress and Accomplishments (with Discussion):**

We have placed landmarks on 959 normotensive and 63 Hypotensive scans. We are continuing with the process and we run the measurements of major and minor axis and of a 5cm volume measurement.

- **Key Methodology:**

Points within the vena cava are placed manually, and then a line is derived. Landmarks (right and left iliac, inferior and superior bifurcation, left and right renal, supra hepatic, and IVC heart junction) are identified on the scans and recorded in the database. A custom algorithm is then run to determine the major and minor axis of the vena cava, providing insight into its eccentricity and level of collapse. Finally a 5cm segment is identified, and volume is derived to provide further data on the condition of the vena cava.

- **Data:**

<i>Vena Cava</i>	<i>Landmarks</i>
Normotensive	959
Hypotensive	63

**1.8: Civilian Analysis (12/07/15-04/08/16)**

- **Current Objectives:**  
Hemodynamic data, in conjunction with age, gender, height, weight, and BMI data as well as analytic morphomic data (distances between bony landmarks, body composition, and cross sectional area and circumference, etc.) will be analyzed with the aortic/vena caval data to determine nomograms for optimal balloon insertion and inflation targets.
- **Results, Progress and Accomplishments (with Discussion):**  
Although this task is not scheduled to start until December 2015, we have run some preliminary analysis on the data we have collected thus far.
- **Key Methodology:**  
We will be using the tool, Tableau, to analyze the data we have acquired.
- **Data:**  
See preliminary data in Appendix D: Initial Data Analysis (PDF).

*Please note that some of the trends are currently of limited value due to small sample size. These trends will likely change as our processed scan volume increases.*

**2.1: Arrange Access to Military CTs in San Antonio (01/02/15-06/19/15)**

- **Current Objectives:**  
Arrange for access to 500 warfighter CTs for the third aim of this grant.
- **Results, Progress and Accomplishments (with Discussion):**  
We have received IRB approval from HRPO and are working with AISR to determine the most efficient way of getting scans. Unfortunately, this process has stalled a few times, so we are behind schedule. Most recently, we have been in discussions with Jeremy C Pamplin (LTC USARMY MEDCOM AISR US) and Leopoldo C Cancio, MD (CIV USARMY MEDCOM AISR US) to resolve this issue.
- **Key Methodology:**  
Following DOD protocol.

**2.2: Identify 500 CTs from Military Population (SOW #2.2, 06/19/15-10/23/15)**

- This task is on hold until we can resolve SOW 2.1 (above).

## Next Steps

### Civilian Population

- Complete processing and demographic data gathering on last 1000 scans
- Analyze vascular measures, morphomics, and demographics (univariate and multivariate) to identify predictive measures
- Develop nomograms for testing against military population

### Military Population

- Gain access to Military CTs (VPN or CDs, CRADA, IRB)
- Support identification of 500 warfighter CTs
- Receive scans and demographics on military scans
- Process base morphomics on military scans
- Process aorta on military scans
- Process vena cava on military scans

Prepare final analysis report

## 4. KEY RESEARCH ACCOMPLISHMENTS:

“Nothing to report.”

## 5. CONCLUSION:

“Nothing to report.”

## 6. PUBLICATIONS, ABSTRACTS, AND PRESENTATIONS:

“Nothing to report.”

## 7. INVENTIONS, PATENTS AND LICENSES:

“Nothing to report.”

## 8. REPORTABLE OUTCOMES:

“Nothing to report.”

## 9. OTHER ACHIEVEMENTS:

“Nothing to report.”

## 10. REFERENCES:

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#### **11. APPENDICES:**

- Appendix A: Civilian Patient List (PDF)
- Appendix B: Vascular Processing Videos (Powerpoint)
- Appendix C: Morphomics Overview (PDF)
- Appendix D: Initial Data Analysis (PDF)
- Appendix E: Year 01, Quarter 4 Quad Chart
- Appendix F: Year 01 Quarter 4 Timeline
- Appendix G: Machine Learning

# **APPENDIX A**

## **Civilian Patient List**

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
554	4:44:10	CT THORAX W IV CONTRAS	8/9/2008 12:59	21	White	M	129	78	DOD ECG
3125	8:09:27	CT ANGIO CHEST WO AND W CONTRAST	6/5/2009 7:31	47	White	M	16	97	DOD ECG
3195	1:06:38	CT THORAX W IV CONTRAST	3/3/2010 19:30	45	Black	M	103	95	DOD ECG
3286	0:43:13	CHEST ABDOMEN PELVIS	2/1/2009 18:03	21	White	F	147	105	DOD ECG
3322	0:30:11	CHEST ABDOMEN PELVIS	12/7/2008 8:55	29	White	M	147	86	DOD ECG
3512	0:29:19	CT THORAX W IV CONTRAS	10/11/2008 19:40	48	White	M	140	76	DOD ECG
3514	0:55:26	CHEST ABDOMEN PELVIS	10/9/2008 10:36	47	White	M	149	62	DOD ECG
6997	0:54:50	CT THORAX W IV CONTRAS	8/9/2008 12:01	38	White	M	145	68	DOD ECG
7822	8:13:06	CHEST ABDOMEN PELVIS	6/16/2008 5:23	28	White	F	132	74	DOD ECG
7828	3:48:58	CT THORAX W IV CONTRAS	6/10/2008 7:28	38	White	M	156	87	DOD ECG
7838	3:04:33	CT THORAX W IV CONTRAS	6/9/2008 5:03	21	White	M	105	67	DOD ECG
7885	0:45:00	CHEST ABDOMEN PELVIS	4/28/2008 4:44	23	White	F	110	87	DOD ECG
7909	0:37:31	CHEST ABDOMEN PELVIS	4/3/2008 14:37	30	White	M	118	74	DOD ECG
7933	0:35:53	CHEST ABDOMEN PELVIS	2/26/2008 10:51	43	White	M	156	87	DOD ECG
7974	0:44:08	CHEST ABDOMEN PELVIS	1/6/2008 13:39	35	White	F	120	109	DOD ECG
7990	1:57:31	CHEST ABDOMEN PELVIS	12/20/2007 2:19	44	White	M	166	100	DOD ECG
9200	0:29:35	CHEST ABDOMEN PELVIS	7/12/2007 13:33	19	White	M	159	74	DOD ECG
9246	0:43:30	CHEST ABDOMEN PELVIS	6/19/2007 1:53	26	White	M	121	115	DOD ECG
9264	0:25:50	CHEST ABDOMEN PELVIS	6/3/2007 17:14	37	White	F	114	122	DOD ECG
10551	0:39:32	CT THORAX W IV CONTRAST	8/23/2009 8:10	44	White	M	118	81	DOD ECG
10815	0:34:56	CT THORAX W IV CONTRAST	9/9/2009 10:36	35	White	M	123	88	DOD ECG
10924	1:10:15	CT THORAX W IV CONTRAST	7/16/2009 15:25	33	White	M	152	111	DOD ECG
11631	0:35:51	CT ABDOMEN W IV CONTRAST	8/9/2009 3:23	21	White	M	71	103	DOD ECG
13399	2:39:40	CT THORAX W IV CONTRAST	8/19/2009 7:04	21	White	M	151	113	DOD ECG
16034	0:48:54	CT ABDOMEN W IV CONTRAST	6/2/2010 16:39	19	White	M	160	55	DOD ECG
16069	1:12:24	CT ABDOMEN W IV CONTRAST	2/20/2010 13:02	20	Hispanic	M	134	78	DOD ECG
21970	2:01:54	CT THORAX W IV CONTRAST	8/20/2010 1:15	41	White	M	163	109	DOD ECG
23575	0:30:47	CT THORAX W IV CONTRAST	6/22/2009 20:00	42	White	F	142	68	DOD ECG
23705	0:59:37	CT THORAX W IV CONTRAST	9/1/2011 14:29	22	White	F	130	129	DOD ECG
23726	0:35:40	CT THORAX W IV CONTRAST	8/1/2011 17:07	20	White	M	139	122	DOD ECG
23881	0:49:38	CT THORAX W IV CONTRAST	7/2/2011 6:21	49	White	M	123	95	DOD ECG
23883	0:33:13	CT THORAX W IV CONTRAST	7/2/2011 7:29	47	White	M	141	96	DOD ECG
23924	0:33:05	CT ABDOMEN PELVIS W IV CONTRAST	6/7/2011 14:37	18	White	F	141	66	DOD ECG
23925	0:30:48	CT ABDOMEN PELVIS W IV CONTRAST	6/5/2011 23:27	47	White	M	180	81	DOD ECG
23930	0:28:35	CT ABDOMEN PELVIS W IV CONTRAST	5/26/2011 13:56	22	White	M	160	90	DOD ECG
24439	1:08:52	CT THORAX W IV CONTRAST	6/19/2005 6:12	20	White	M	140	98	DOD ECG
49464	2:24:51	CT THORAX W IV CONTRAST	8/27/2010 0:29	35	White	M	140	82	DOD ECG
52937	1:11:42	CT THORAX W IV CONTRAST	10/23/2011 15:29	48	White	M	177	91	DOD ECG
52945	1:15:03	CT THORAX W IV CONTRAST	12/2/2011 20:34	50	White	F	195	76	DOD ECG
52949	0:28:57	CT THORAX W IV CONTRAST	3/5/2012 15:51	49	White	M	165	100	DOD ECG
52974	1:48:17	CT THORAX W IV CONTRAST	1/22/2012 5:18	31	White	F	90	69	DOD ECG
53834	3:38:20	CT THORAX W IV CONTRAST	10/11/2011 6:16	34	Black	M	152	75	DOD ECG
53966	0:45:29	CT ABDOMEN PELVIS W IV CONTRAST	2/4/2012 5:45	25	Black	F	129	94	DOD ECG
54436	0:37:30	CT THORAX W IV CONTRAST	12/1/2012 14:58	42	White	M	118	81	DOD ECG
68795	0:49:34	CT THORAX W IV CONTRAST	9/9/2009 2:54	35	White	M	181	66	DOD ECG
68796	0:35:48	CT THORAX W IV CONTRAST	3/20/2008 15:26	31	White	M	133	84	DOD ECG
68797	0:38:21	CT THORAX W IV CONTRAST	9/22/2008 9:26	36	White	M	149	100	DOD ECG
68798	1:08:34	CT THORAX W IV CONTRAST	11/8/2008 8:23	33	White	M	98	80	DOD ECG
68799	2:05:16	CT THORAX W IV CONTRAST	12/31/2007 14:32	36	White	M	186	68	DOD ECG
68800	14:27:18	CT THORAX W IV CONTRAST	6/6/2010 22:24	45	White	F	145	80	DOD ECG
68801	0:46:32	CT THORAX W IV CONTRAST	11/5/2009 10:26	25	White	F	140	115	DOD ECG
68802	0:28:11	CT THORAX W IV CONTRAST	12/14/2010 11:21	41	White	M	159	95	DOD ECG

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
68803	0:38:50	CT THORAX W IV CONTRAST	11/1/2010 2:06	19	White	M	143	96	DOD ECG
68804	0:30:44	CT THORAX W IV CONTRAST	10/2/2010 14:11	19	White	M	144	84	DOD ECG
68805	1:33:05	CT THORAX W IV CONTRAST	11/25/2011 6:04	31	Black	F	125	115	DOD ECG
68806	1:18:57	CT THORAX W IV CONTRAST	4/15/2012 18:16	18	White	M	159	86	DOD ECG
68807	0:45:29	CT THORAX W IV CONTRAST	2/4/2012 5:45	25	Black	F	129	94	DOD ECG
68808	5:07:02	CT THORAX W IV CONTRAST	12/5/2011 3:06	37	White	M	135	98	DOD ECG
68809	0:58:14	CT THORAX W IV CONTRAST	1/28/2012 18:43	19	White	M	146	142	DOD ECG
68810	0:41:07	CT THORAX W IV CONTRAST	1/13/2012 14:16	20	White	F	116	79	DOD ECG
68811	2:16:47	CT THORAX W IV CONTRAST	2/18/2012 15:36	26	White	M	199	103	DOD ECG
68812	12:30:17	CT ANGIO CHEST WO AND W CONTRAST	8/1/2012 8:03	23	White	F	134	76	DOD ECG
68813	0:53:21	CT THORAX W IV CONTRAST	4/29/2012 4:11	24	White	F	135	120	DOD ECG
68815	13:47:32	CT THORAX W IV CONTRAST	10/13/2012 9:35	37	White	F	129	102	DOD ECG
68816	0:56:24	CT THORAX W IV CONTRAST	11/16/2012 14:29	33	White	F	132	84	DOD ECG
68817	0:56:24	CT THORAX W IV CONTRAST	1/17/2013 9:48	39	White	M	203	82	DOD ECG
68818	1:05:33	CT THORAX W IV CONTRAST	2/20/2013 14:26	20	White	F	149	122	DOD ECG
68819	0:38:18	CT THORAX W IV CONTRAST	3/13/2013 11:52	22	White	F	110	78	DOD ECG
68820	0:58:29	CT ANGIO CHEST WO AND W CONTRAST	11/11/2007 2:37	19	White	M	132	105	DOD ECG
160	1:23:09	CHEST ABDOMEN PELVIS	3/24/2004 2:27	21	White	M	87	130	DOD hypotensive
559	3:42:27	CT THORAX W IV CONTRAS	2/20/2006 8:57	25	White	M	82	145	DOD hypotensive
646	1:36:10	CHEST ABDOMEN PELVIS	7/8/2004 23:36	39	White	M	78	102	DOD hypotensive
673	1:05:40	CHEST ABDOMEN PELVIS	8/24/2002 8:30	35	White	M	82	105	DOD hypotensive
1788	2:19:48	CHEST ABDOMEN PELVIS	11/24/2004 6:56	19	White	M	77	156	DOD hypotensive
2163	0:50:42	CT THORAX W IV CONTRAS	6/18/2009 4:51	31	White	F	79	117	DOD hypotensive
3089	1:22:14	CHEST ABDOMEN PELVIS	6/27/2009 4:17	35	White	M	66	118	DOD hypotensive
3090	0:58:46	CHEST ABDOMEN PELVIS	6/27/2009 21:45	18	White	M	67	106	DOD hypotensive
3225	1:03:25	CHEST ABDOMEN PELVIS	4/16/2009 17:38	49	White	M	75	121	DOD hypotensive
3463	1:05:16	CHEST ABDOMEN PELVIS	10/14/2008 4:09	34	Black	M	75	102	DOD hypotensive
4348	0:56:45	CHEST ABDOMEN PELVIS	9/26/2008 17:50	42	White	M	87	120	DOD hypotensive
4374	1:14:50	CT THORAX W IV CONTRAST	8/30/2008 10:19	19	White	M	95	122	DOD hypotensive
7812	6:15:31	CHEST ABDOMEN PELVIS	6/23/2008 2:13	22	White	M	73	122	DOD hypotensive
7849	0:57:56	CHEST ABDOMEN PELVIS	5/24/2008 16:04	45	White	F	69	113	DOD hypotensive
7871	5:52:30	CHEST ABDOMEN PELVIS	5/5/2008 10:56	23	White	F	52	105	DOD hypotensive
7876	0:54:15	CHEST ABDOMEN PELVIS	5/4/2008 18:50	48	White	M	67	157	DOD hypotensive
7915	0:46:50	CT ABDOMEN W IV CONTRA	3/21/2008 2:34	18	White	M	78	122	DOD hypotensive
7963	1:48:35	CHEST ABDOMEN PELVIS	3/13/2008 18:30	45	White	M	68	140	DOD hypotensive
7981	0:47:09	CHEST ABDOMEN PELVIS	1/1/2008 14:07	19	White	M	86	132	DOD hypotensive
8920	1:02:53	CT THORAX W IV CONTRAS	10/7/2007 1:44	28	White	M	67	119	DOD hypotensive
9314	1:07:19	CT ABDOMEN W IV CONTRA	4/23/2007 4:06	20	White	M	75	104	DOD hypotensive
9338	1:33:11	CHEST ABDOMEN PELVIS	3/26/2007 12:20	38	White	M	75	140	DOD hypotensive
9496	1:41:16	CHEST ABDOMEN PELVIS	12/5/2006 14:41	24	White	M	90	118	DOD hypotensive
10585	0:52:44	ABDOMEN	8/16/2001 14:30	50	White	F	88	106	DOD hypotensive
10938	6:54:22	CT ABDOMEN W IV CONTRAST	2/5/2010 0:44	39	White	F	66	114	DOD hypotensive
11392	0:47:01	CT THORAX W IV CONTRAST	4/23/2010 4:40	24	White	F	96	130	DOD hypotensive
11616	1:24:16	CT ABDOMEN W IV CONTRAST	11/13/2009 20:44	30	Other	F	80	102	DOD hypotensive
11631	0:35:51	CT ABDOMEN W IV CONTRAST	8/9/2009 3:23	21	White	M	71	103	DOD hypotensive
12417	2:40:23	CHEST ABDOMEN PELVIS	2/11/2006 8:25	32	White	F	96	113	DOD hypotensive
13043	1:12:45	CHEST ABDOMEN PELVIS	1/24/2006 12:44	24	White	M	92	133	DOD hypotensive
14340	0:56:24	CT THORAX W IV CONTRAST	12/6/2010 20:45	21	White	M	78	157	DOD hypotensive
16057	0:48:57	CT ABDOMEN W IV CONTRAST	5/24/2010 16:38	27	White	M	83	109	DOD hypotensive
16867	1:28:28	CT THORAX W IV CONTRAST	7/3/2007 8:47	32	White	F	93	113	DOD hypotensive
19466	10:15:20	CT THORAX W IV CONTRAST	11/17/2007 2:32	19	White	F	72	102	DOD hypotensive
21890	0:41:59	CT ABDOMEN W IV CONTRAST	8/24/2009 23:28	24	White	M	88	118	DOD hypotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
21946	19:59:29	CT THORAX W IV CONTRAST	9/25/2011 22:07	20	White	M	78	115	DOD hypotensive
21953	0:38:35	CT ABDOMEN PELVIS W IV CONTRAST	9/25/2011 2:46	20	White	M	78	115	DOD hypotensive
22752	1:51:38	CT THORAX W IV CONTRAST	6/7/2004 1:39	19	White	F	98	110	DOD hypotensive
23561	3:26:21	CT THORAX W IV CONTRAST	12/12/2009 15:33	36	White	F	85	111	DOD hypotensive
24379	1:38:16	CT THORAX W IV CONTRAST	10/23/2004 18:47	19	White	F	55	138	DOD hypotensive
24436	1:26:51	CT THORAX W IV CONTRAST	6/17/2005 13:04	41	White	F	44	116	DOD hypotensive
24482	1:24:22	CT ABDOMEN W IV CONTRAST	7/19/2005 12:22	41	White	M	93	135	DOD hypotensive
24656	5:30:44	CT THORAX W IV CONTRAST	2/24/2007 3:52	47	White	M	79	122	DOD hypotensive
35635	1:07:15	CT ABDOMEN W IV CONTRAST	1/19/2010 22:59	48	White	M	75	128	DOD hypotensive
49484	1:06:45	CT THORAX W IV CONTRAST	8/6/2005 23:10	45	White	M	68	118	DOD hypotensive
53899	1:05:09	CT THORAX W IV CONTRAST	11/10/2011 17:22	42	White	F	80	116	DOD hypotensive
54158	-03:28:36	CT Outside Film ABDOMEN AND PELVIS	8/2/2012 1:24	40	Black	M	69	126	DOD hypotensive
54319	2:05:20	CT THORAX W IV CONTRAST	9/9/2012 18:03	45	White	F	78	111	DOD hypotensive
54340	0:51:57	CT THORAX W IV CONTRAST	8/31/2012 22:08	44	White	F	87	130	DOD hypotensive
54342	1:31:01	CT ABDOMEN PELVIS W IV CONTRAST	8/12/2012 19:36	50	White	F	90	128	DOD hypotensive
54372	0:46:37	CT POST PROCESSED L SPINE	9/21/2012 7:32	24	White	F	78	120	DOD hypotensive
55782	1:21:28	CT THORAX W IV CONTRAST	8/6/2005 15:01	42	White	F	97	105	DOD hypotensive
59391	2:04:35	CT ABDOMEN PELVIS W IV CONTRAST	2/21/2013 18:45	44	White	F	98	126	DOD hypotensive
60918	1:08:11	CT ABDOMEN W IV CONTRAST	6/9/2003 23:49	18	White	M	63	155	DOD hypotensive
66225	1:37:27	CT THORAX W IV CONTRAST	7/4/2007 16:21	32	White	M	84	131	DOD hypotensive
66278	1:18:02	CT THORAX W IV CONTRAST	4/29/2002 15:53	47		M	60	145	DOD hypotensive
66279	23:39:34	CT THORAX W IV CONTRAST	8/7/2004 16:30	49	Other	F	74	106	DOD hypotensive
66280	0:58:36	CT ABDOMEN W IV CONTRAST	7/25/2003 10:04	30		M	86	133	DOD hypotensive
66281	0:50:54	CT THORAX W IV CONTRAST	6/10/2005 8:34	40	White	M	41	188	DOD hypotensive
66282	1:09:34	CT THORAX W IV CONTRAST	8/11/2007 11:02	34	White	M	53	130	DOD hypotensive
66283	2:05:35	CT ABDOMEN W IV CONTRAST	12/20/2003 18:57	50	White	M	85	120	DOD hypotensive
66284	1:32:27	CT THORAX W IV CONTRAST	11/5/2006 16:05	32	White	M	83	142	DOD hypotensive
66285	1:20:12	CT THORAX W IV CONTRAST	10/15/2004 6:10	21	White	F	80	121	DOD hypotensive
66286	-05:33:37	CT OUTSIDE FILM CONSULT CHEST	11/14/2009 16:31	49	White	F	83	117	DOD hypotensive
66288	2:30:50	CT THORAX W IV CONTRAST	9/10/2005 13:26	47	White	F	86	114	DOD hypotensive
66297	0:45:51	CT THORAX W IV CONTRAST	5/5/2008 18:15	39	White	M	86	119	DOD hypotensive
66298	1:40:19	CT THORAX W IV CONTRAST	4/29/2009 0:00	37	Black	M	83	135	DOD hypotensive
66299	-00:53:02	CT OUTSIDE FILM CONSULT ABDOMEN	8/28/2010 10:18	44	White	F	76	130	DOD hypotensive
66300	-02:22:04	CT OUTSIDE FILM CONSULT CHEST	9/23/2012 18:14	44	White	M	45	130	DOD hypotensive
66302	1:13:40	CT ABDOMEN W IV CONTRAST	6/11/2000 7:12	42	White	M	77	106	DOD hypotensive
67032	1:02:39	CT THORAX W IV CONTRAST	1/30/2002 11:37	46	White	M	94	105	DOD hypotensive
67033	0:41:27	CT THORAX W IV CONTRAST	4/8/2003 19:28	36	White	M	92	131	DOD hypotensive
67035	0:51:54	CT ABDOMEN W IV CONTRAST	6/28/2009 22:44	39	White	F	99	112	DOD hypotensive
67036	0:34:11	CT THORAX W IV CONTRAST	1/23/2009 21:57	21	White	M	98	112	DOD hypotensive
67037	0:42:40	CT THORAX W IV CONTRAST	8/3/2008 20:15	20	White	M	94	105	DOD hypotensive
67039	1:41:16	CT ABDOMEN W IV CONTRAST	12/5/2006 14:41	24	White	M	90	118	DOD hypotensive
67042	2:40:23	CT THORAX W IV CONTRAST	2/11/2006 8:25	32	White	F	96	113	DOD hypotensive
67045	1:01:24	CT ABDOMEN PELVIS W IV CONTRAST	3/23/2011 23:29	28	White	F	91	101	DOD hypotensive
67050	1:47:54	CT ANGIO CHEST WO AND W CONTRAST	8/21/2011 6:23	24	White	M	91	118	DOD hypotensive
67053	1:10:52	CT ABDOMEN W IV CONTRAST	7/29/2006 5:10	24	White	M	98	151	DOD hypotensive
0	0:56:01	CHEST ABDOMEN PELVIS	10/20/2001 20:03	47	White	M	151	79	DOD normotensive
6	1:22:07	CHEST ABDOMEN PELVIS	4/24/2004 7:07	31	White	M	144	100	DOD normotensive
10	0:22:06	CHEST ABDOMEN PELVIS	10/31/2001 18:11	21	White	M	136	97	DOD normotensive
29	0:58:34	CHEST ABDOMEN PELVIS	1/5/2004 9:50	36	White	M	134	69	DOD normotensive
47	1:20:48	CHEST ABDOMEN PELVIS	1/21/2002 8:36	27	White	M	120	66	DOD normotensive
56	0:58:57	CT THORAX W IV CONTRAS	6/6/2005 2:29	48		F	135	82	DOD normotensive
83	1:31:47	CHEST ABDOMEN PELVIS	7/17/2002 2:43	31	White	M	162	99	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
88	1:36:25	CHEST ABDOMEN PELVIS	1/23/2004 10:02	50	White	M	145	93	DOD normotensive
89	1:31:07	CHEST ABD PELVIS	2/4/2004 18:28	46	White	M	143	90	DOD normotensive
114	0:42:41	CHEST ABDOMEN PELVIS	5/28/2008 9:33	37	White	M	127	90	DOD normotensive
118	0:44:07	CT ABDOMEN W IV CONTRA	9/24/2005 21:46	31	White	F	133	81	DOD normotensive
121	1:21:28	CHEST ABDOMEN PELVIS	6/13/2005 12:40	43	White	F	155	86	DOD normotensive
131	1:16:38	CHEST ABDOMEN PELVIS	7/26/2006 9:24	23	White	M	142	82	DOD normotensive
133	1:50:21	CT THORAX W IV CONTRAS	4/1/2006 2:19	24	White	M	139	77	DOD normotensive
146	2:10:55	CT THORAX W IV CONTRAS	11/18/2006 22:55	46	White	M	138	95	DOD normotensive
147	1:04:10	CHEST ABDOMEN PELVIS	10/29/2006 5:14	19	White	F	144	92	DOD normotensive
151	1:24:28	CHEST ABDOMEN PELVIS	10/5/2004 15:32	48	White	M	140	76	DOD normotensive
158	1:57:34	CHEST ABDOMEN PELVIS	9/28/2004 17:48	29	White	F	130	72	DOD normotensive
176	1:08:44	CHEST ABDOMEN PELVIS	7/22/2003 15:58	32	White	M	134	92	DOD normotensive
177	0:38:06	ABDOMEN	4/2/2003 18:14	44	White	F	138	90	DOD normotensive
194	1:08:37	ABDOMEN	1/28/2003 22:28	49	White	F	125	85	DOD normotensive
196	1:39:11	ABDOMEN	2/9/2003 3:33	46	White	F	128	77	DOD normotensive
207	1:23:58	CHEST ABDOMEN PELVIS	10/23/2006 4:00	29	White	F	151	96	DOD normotensive
218	0:43:18	CHEST ABDOMEN PELVIS	6/14/2002 1:44	38	White	F	144	100	DOD normotensive
223	1:28:12	CHEST ABDOMEN PELVIS	8/29/2002 22:08	48	White	F	151	47	DOD normotensive
225	0:52:30	ABDOMEN	11/11/2002 17:00	20	Black	M	150	68	DOD normotensive
228	0:55:13	CHEST ABDOMEN PELVIS	8/20/2002 15:22	23	White	F	129	89	DOD normotensive
232	0:31:47	ABDOMEN	7/7/2002 17:52	31	White	F	125	97	DOD normotensive
236	0:36:47	ABDOMEN PELVIS	3/9/2002 3:49	24	White	M	139	78	DOD normotensive
237	7:36:49	ABDOMEN	3/13/2002 8:17	35	White	F	121	96	DOD normotensive
242	1:11:51	ABDOMEN	7/15/2002 17:24	45	White	M	144	72	DOD normotensive
243	0:20:43	ABDOMEN	8/3/2002 22:25	39	White	F	126	74	DOD normotensive
244	8:21:12	ABDOMEN	10/16/2002 21:17	48	Black	M	157	89	DOD normotensive
253	0:43:00	CHEST ABDOMEN PELVIS	4/24/2007 3:13	33	White	M	133	81	DOD normotensive
258	0:49:42	CT ABDOMEN W IV CONTRA	4/26/2007 12:29	24	White	F	121	96	DOD normotensive
262	0:39:28	CHEST ABDOMEN PELVIS	8/19/2007 5:09	29	White	M	154	90	DOD normotensive
425	20:00:06	CHEST ABDOMEN PELVIS	8/9/2002 17:18	19	White	M	125	98	DOD normotensive
427	1:54:11	CHEST ABDOMEN PELVIS	8/4/2002 15:37	42	White	F	157	96	DOD normotensive
432	1:02:20	ABDOMEN	9/15/2002 20:37	36	White	M	176	92	DOD normotensive
438	0:56:54	CHEST ABDOMEN PELVIS	3/17/2003 20:31	40	White	M	142	85	DOD normotensive
440	1:06:41	ABDOMEN	4/27/2003 20:08	26	White	M	140	71	DOD normotensive
441	1:11:29	CHEST ABDOMEN PELVIS	5/18/2003 18:01	26	White	M	152	63	DOD normotensive
444	0:49:57	ABDOMEN	5/17/2003 14:08	42	White	F	133	80	DOD normotensive
445	1:04:08	CHEST ABDOMEN PELVIS	6/24/2003 12:56	24	White	M	144	61	DOD normotensive
481	2:14:59	ABDOMEN	6/26/2003 16:09	20	White	M	143	80	DOD normotensive
485	1:04:52	ABDOMEN	11/27/2004 18:52	40	White	M	126	74	DOD normotensive
492	1:58:34	ABDOMEN	12/8/2002 1:08	45	White	M	133	72	DOD normotensive
493	1:12:45	ABDOMEN PELVIS	12/10/2002 12:03	45	White	M	159	78	DOD normotensive
495	2:29:48	ABDOMEN	5/7/2004 6:23	43	White	M	165	86	DOD normotensive
508	1:34:46	ABDOMEN	11/24/2004 17:51	40	White	M	140	88	DOD normotensive
511	0:46:07	ABDOMEN	11/28/2004 18:56	22	White	M	158	96	DOD normotensive
513	1:03:07	ABDOMEN PELVIS	12/2/2004 12:33	34	White	M	137	79	DOD normotensive
514	0:52:18	ABDOMEN PELVIS	12/3/2004 14:08	35	White	F	129	93	DOD normotensive
515	1:32:23	ABDOMEN	12/2/2004 3:01	42	White	M	146	93	DOD normotensive
516	1:09:38	ABDOMEN	12/4/2004 5:02	44	White	M	174	97	DOD normotensive
530	-06:56:32	CT ABDOMEN W CONTRAST=AB	6/28/2008 7:18	49	White	F	138	88	DOD normotensive
533	2:10:18	ABDOMEN	9/23/2004 13:37	42	White	F	194	95	DOD normotensive
534	5:33:39	ABDOMEN	10/10/2004 15:52	40	Black	M	134	80	DOD normotensive
535	0:49:33	CHEST ABDOMEN PELVIS	10/14/2004 6:21	20	Black	F	114	93	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
538	1:22:00	ABDOMEN	10/8/2004 22:29	49	White	F	147	85	DOD normotensive
539	1:12:55	CHEST ABDOMEN PELVIS	10/13/2004 12:23	32	Other	M	147	84	DOD normotensive
540	0:49:37	ABDOMEN PELVIS	10/12/2004 14:11	44	Black	M	146	76	DOD normotensive
554	4:44:10	CT THORAX W IV CONTRAS	8/9/2008 12:59	21	White	M	129	78	DOD normotensive
573	5:46:11	CHEST ABDOMEN PELVIS	9/13/2004 2:11	25	White	F	100	122	DOD normotensive
574	14:21:40	ABDOMEN	9/15/2004 8:27	21	White	F	131	58	DOD normotensive
577	1:22:32	CHEST ABDOMEN PELVIS	9/22/2004 10:20	48		F	139	73	DOD normotensive
584	1:04:21	CHEST ABDOMEN PELVIS	8/9/2004 8:52	40	White	M	162	85	DOD normotensive
593	0:53:38	CHEST ABDOMEN PELVIS	7/24/2004 17:38	39	White	M	146	75	DOD normotensive
599	0:48:36	CHEST ABDOMEN PELVIS	6/20/2004 1:32	45	White	M	144	94	DOD normotensive
601	1:59:11	CHEST ABDOMEN PELVIS	6/29/2004 23:47	19	White	M	142	69	DOD normotensive
602	1:01:01	CHEST ABDOMEN PELVIS	7/4/2004 14:52	40	Black	M	165	81	DOD normotensive
606	0:48:50	CHEST ABDOMEN PELVIS	7/19/2004 18:58	38	White	M	160	78	DOD normotensive
607	0:48:48	CHEST ABDOMEN PELVIS	7/21/2004 3:07	19	White	M	156	95	DOD normotensive
610	1:13:11	CHEST ABDOMEN PELVIS	6/24/2004 9:44	34	White	F	127	96	DOD normotensive
614	0:45:24	CHEST ABDOMEN PELVIS	6/15/2003 23:30	40	White	M	151	77	DOD normotensive
618	2:00:36	CHEST ABDOMEN PELVIS	7/2/2003 20:22	40	White	M	147	98	DOD normotensive
626	0:40:52	CHEST ABDOMEN PELVIS	9/14/2003 15:31	40	White	M	126	85	DOD normotensive
636	4:18:47	CHEST ABDOMEN PELVIS	5/13/2004 5:44	45	White	M	140	80	DOD normotensive
639	1:34:33	CHEST ABDOMEN PELVIS	5/31/2004 17:29	33	Black	M	171	93	DOD normotensive
640	1:24:52	CHEST ABDOMEN PELVIS	5/29/2004 19:34	39	White	M	133	64	DOD normotensive
641	1:14:01	ABDOMEN	8/31/2004 22:46	31	White	M	155	87	DOD normotensive
650	1:24:29	CHEST ABDOMEN PELVIS	8/8/2004 21:12	49	White	M	131	86	DOD normotensive
653	1:27:36	ABDOMEN	8/6/2004 23:30	47		M	138	80	DOD normotensive
654	1:03:09	ABDOMEN	8/21/2004 18:03	24	White	M	155	82	DOD normotensive
655	2:48:19	ABDOMEN	9/3/2004 2:18	40	Black	M	161	91	DOD normotensive
656	1:16:13	ABDOMEN	9/2/2004 16:42	44	White	M	152	72	DOD normotensive
657	2:46:24	ABDOMEN	8/27/2004 23:26	42	White	M	138	98	DOD normotensive
658	0:36:41	ABDOMEN	8/29/2004 9:16	26	White	M	134	77	DOD normotensive
660	2:33:53	ABDOMEN	8/28/2004 19:00	30	White	F	140	93	DOD normotensive
661	3:39:03	CHEST ABDOMEN PELVIS	8/19/2004 22:25	28	White	M	169	76	DOD normotensive
662	1:05:52	ABDOMEN	9/6/2004 12:44	24	White	M	137	79	DOD normotensive
664	1:24:33	ABDOMEN	9/25/2004 17:52	43	White	M	154	66	DOD normotensive
668	1:02:18	CHEST ABDOMEN PELVIS	10/30/2004 16:44	31	Hispanic	M	129	91	DOD normotensive
678	0:37:36	CHEST ABDOMEN PELVIS	12/8/2002 22:15	47	White	M	143	90	DOD normotensive
698	2:20:30	CHEST ABDOMEN PELVIS	8/19/2004 20:55	37	White	M	130	72	DOD normotensive
708	1:11:31	CHEST ABDOMEN PELVIS	2/8/2002 10:02	43	White	M	135	96	DOD normotensive
710	0:38:18	ABDOMEN PELVIS	3/25/2002 15:08	33	White	F	128	68	DOD normotensive
712	1:11:31	ABDOMEN PELVIS	2/21/2002 22:14	40	White	F	126	100	DOD normotensive
723	1:30:42	CHEST ABDOMEN PELVIS	7/5/2002 3:20	42	White	M	124	71	DOD normotensive
730	0:52:49	ABDOMEN	5/25/2002 4:50	20	White	M	135	90	DOD normotensive
741	0:53:31	CHEST ABDOMEN PELVIS	6/21/2002 17:08	44	White	F	136	74	DOD normotensive
742	0:59:51	CHEST ABDOMEN PELVIS	6/22/2002 0:42	47	White	M	136	64	DOD normotensive
743	4:29:13	CHEST ABDOMEN PELVIS	6/27/2002 1:28	50	White	F	148	81	DOD normotensive
747	0:37:21	ABDOMEN	7/6/2002 21:56	36	White	F	142	92	DOD normotensive
759	1:28:47	CHEST ABDOMEN PELVIS	10/17/2002 17:30	36	White	F	121	80	DOD normotensive
760	1:06:49	ABDOMEN PELVIS	10/23/2002 14:58	45	White	F	162	83	DOD normotensive
771	0:51:11	ABDOMEN PELVIS	12/17/2002 4:21	19	Asian	M	128	90	DOD normotensive
775	1:44:44	ABDOMEN PELVIS	2/5/2003 0:44	33	White	F	125	96	DOD normotensive
776	0:56:13	ABDOMEN PELVIS	1/31/2003 12:05	44	White	M	120	82	DOD normotensive
777	1:36:07	ABDOMEN PELVIS	2/10/2003 22:06	26	Black	M	120	62	DOD normotensive
782	0:55:06	ABDOMEN PELVIS	2/27/2003 19:53	33	White	F	151	75	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
794	1:03:41	ABDOMEN PELVIS	3/21/2003 5:20	21	White	F	134	88	DOD normotensive
798	1:12:05	CHEST ABDOMEN PELVIS	3/27/2003 10:35	31	White	F	135	92	DOD normotensive
799	1:03:32	CHEST ABDOMEN PELVIS	4/5/2003 1:11	45	White	F	140	76	DOD normotensive
800	2:47:30	CHEST ABDOMEN PELVIS	4/12/2003 22:25	40	White	M	146	93	DOD normotensive
801	2:02:05	CHEST ABDOMEN PELVIS	4/16/2003 4:02	48	Black	M	157	88	DOD normotensive
805	1:01:53	CHEST ABDOMEN PELVIS	4/29/2003 2:01	21	White	F	137	82	DOD normotensive
813	11:18:18	CHEST ABDOMEN PELVIS	6/17/2003 21:16	36	White	F	168	70	DOD normotensive
816	1:13:33	ABDOMEN PELVIS	7/23/2003 19:35	24	White	M	151	88	DOD normotensive
819	1:28:22	CHEST ABDOMEN PELVIS	7/14/2003 21:58	21	White	F	175	80	DOD normotensive
820	0:49:58	CHEST ABDOMEN PELVIS	7/10/2003 23:19	24	White	M	163	76	DOD normotensive
823	0:39:32	ABDOMEN PELVIS	7/29/2003 12:48	31	White	M	150	68	DOD normotensive
826	1:33:43	ABDOMEN	8/17/2003 3:19	20	White	M	131	97	DOD normotensive
828	0:42:45	ABDOMEN	8/17/2003 18:24	27	White	M	142	78	DOD normotensive
833	2:22:58	CHEST ABDOMEN PELVIS	9/9/2003 13:54	31	White	F	142	74	DOD normotensive
837	0:49:57	CHEST ABDOMEN PELVIS	9/2/2003 20:57	25	White	M	150	79	DOD normotensive
838	0:49:24	CHEST ABDOMEN PELVIS	12/7/2003 2:02	35	White	M	123	92	DOD normotensive
847	1:20:30	CHEST ABDOMEN PELVIS	11/17/2003 16:14	43	White	M	140	90	DOD normotensive
861	0:42:30	CHEST ABDOMEN PELVIS	10/27/2002 17:08	30	Asian	M	133	63	DOD normotensive
864	0:59:34	CHEST ABDOMEN PELVIS	11/18/2008 11:15	45	White	F	212	89	DOD normotensive
865	1:40:34	CHEST ABDOMEN PELVIS	11/8/2008 14:52	50	White	M	151	80	DOD normotensive
867	1:05:38	CHEST ABDOMEN PELVIS	5/9/2003 20:07	25	White	M	142	100	DOD normotensive
878	3:24:42	ABDOMEN PELVIS	6/30/2004 22:25	23	White	F	137	99	DOD normotensive
883	1:13:54	CHEST ABDOMEN PELVIS	9/11/2004 18:29	42	White	M	146	81	DOD normotensive
886	1:32:35	CHEST ABDOMEN PELVIS	4/5/2004 8:17	42	White	F	137	84	DOD normotensive
887	1:26:13	CHEST ABDOMEN PELVIS	4/26/2004 10:47	27	White	M	141	95	DOD normotensive
898	0:48:19	ABDOMEN	5/21/2004 2:43	22	Black	F	123	48	DOD normotensive
903	1:29:12	ABDOMEN	5/21/2004 17:59	34	White	M	132	83	DOD normotensive
918	1:30:37	CHEST ABDOMEN PELVIS	3/14/2004 2:30	30	White	M	138	74	DOD normotensive
979	0:45:05	CHEST ABDOMEN PELVIS	1/4/2009 11:35	40	White	F	134	90	DOD normotensive
987	0:48:38	ABDOMEN	5/3/2003 23:23	45	White	M	165	79	DOD normotensive
990	0:52:30	ABDOMEN PELVIS	7/16/2002 10:32	19	White	F	137	73	DOD normotensive
991	7:09:39	CHEST ABDOMEN PELVIS	7/27/2002 2:54	40	White	M	154	86	DOD normotensive
993	1:24:41	ABDOMEN PELVIS	7/29/2002 21:05	24	White	F	120	94	DOD normotensive
994	1:23:33	CHEST ABDOMEN PELVIS	8/20/2002 17:57	38	White	M	163	95	DOD normotensive
996	1:29:32	ABDOMEN PELVIS	9/6/2002 10:03	23	White	M	151	97	DOD normotensive
998	0:49:02	CHEST ABDOMEN PELVIS	8/25/2002 17:57	37	White	M	135	87	DOD normotensive
1006	0:51:02	ABDOMEN	8/16/2003 5:19	23	White	F	125	88	DOD normotensive
1007	2:12:19	ABDOMEN	8/15/2003 4:57	39	Black	F	161	91	DOD normotensive
1008	1:11:48	ABDOMEN	9/12/2003 20:06	45	White	F	172	100	DOD normotensive
1059	0:46:20	CHEST ABDOMEN PELVIS	1/6/2009 22:21	19	Black	M	149	90	DOD normotensive
1509	0:39:01	CHEST ABDOMEN PELVIS	5/2/2007 14:18	47	White	F	125	100	DOD normotensive
1606	1:13:17	CHEST ABDOMEN PELVIS	3/5/2009 2:52	27	White	F	131	90	DOD normotensive
1608	0:52:33	CHEST ABDOMEN PELVIS	5/11/2009 8:33	50	White	M	177	60	DOD normotensive
1612	0:51:09	CHEST ABDOMEN PELVIS	6/1/2009 19:26	23	White	F	129	91	DOD normotensive
1635	0:46:54	CHEST ABDOMEN PELVIS	4/5/2009 4:49	24	White	M	138	63	DOD normotensive
1736	1:03:31	CHEST ABDOMEN PELVIS	12/30/2004 3:48	29	White	F	77	88	DOD normotensive
1739	1:11:45	CHEST ABDOMEN PELVIS	6/10/2007 2:00	20	White	F	135	101	DOD normotensive
1744	1:53:11	CHEST ABDOMEN PELVIS	4/30/2007 10:37	41	White	F	123	78	DOD normotensive
1778	0:59:01	CHEST ABDOMEN PELVIS	7/30/2003 10:59	45	White	M	167	84	DOD normotensive
1787	1:28:35	CHEST ABDOMEN PELVIS	2/6/2003 10:44	26	White	F	129	86	DOD normotensive
2420	0:49:34	CHEST ABDOMEN PELVIS	9/9/2009 2:54	35	White	M	181	66	DOD normotensive
3044	1:02:18	CHEST/ABD/PELVIS	7/3/2000 14:20	38	White	M	126	78	DOD normotensive



**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
3055	0:56:13	ABDOMEN PELVIS	12/7/2001 0:27	34	White	M	121	77	DOD normotensive
3058	1:00:57	CHEST ABDOMEN PELVIS	5/22/2001 15:29	37	White	F	133	94	DOD normotensive
3064	1:02:09	ABDOMEN	5/23/2001 11:39	39	White	M	153	71	DOD normotensive
3065	1:02:54	ABDOMEN	8/25/2001 7:14	21	White	M	134	72	DOD normotensive
3069	0:39:00	CT THORAX W IV CONTRAS	10/21/2009 2:03	28	White	M	159	100	DOD normotensive
3083	1:23:47	CHEST ABDOMEN PELVIS	6/28/2009 4:13	31	White	M	147	100	DOD normotensive
3087	0:51:54	CHEST ABDOMEN PELVIS	6/28/2009 22:44	39	White	F	99	112	DOD normotensive
3091	1:24:30	CHEST ABDOMEN PELVIS	6/27/2009 22:35	19	White	M	140	90	DOD normotensive
3092	2:30:38	CHEST ABDOMEN PELVIS	6/27/2009 23:28	19	White	F	105	112	DOD normotensive
3094	0:34:29	CHEST ABDOMEN PELVIS	6/26/2009 17:39	41	White	M	138	100	DOD normotensive
3098	0:40:41	CHEST ABDOMEN PLEVIS	6/21/2009 1:57	26	Black	M	130	96	DOD normotensive
3100	3:25:44	CHEST ABDOMEN PELVIS	6/20/2009 9:15	24	Black	M	154	84	DOD normotensive
3115	1:08:50	CHEST ABDOMEN PELVIS	6/7/2009 19:14	19	White	F	118	76	DOD normotensive
3120	1:48:20	CT THORAX W IV CONTRAST	6/6/2009 22:08	22	White	M	154	90	DOD normotensive
3138	1:18:44	CT THORAX W IV CONTRAST	5/24/2009 22:02	42	White	M	123	79	DOD normotensive
3143	0:24:53	CT THORAX W IV CONTRAST	5/21/2009 22:33	31	White	M	139	97	DOD normotensive
3146	4:30:42	CT THORAX W IV CONTRAST	5/17/2009 21:28	47	White	M	167	77	DOD normotensive
3152	0:40:41	CHEST ABDOMEN PELVIS	1/3/2010 16:49	40	White	M	149	80	DOD normotensive
3157	0:41:51	CHEST ABDOMEN PELVIS	4/11/2002 10:37	49	White	M	194	88	DOD normotensive
3166	0:55:21	CHEST ABDOMEN PELVIS	8/26/2006 2:24	23	White	M	123	94	DOD normotensive
3186	0:28:26	CT THORAX W IV CONTRAST	11/11/2009 16:40	43	White	M	149	51	DOD normotensive
3192	0:44:10	CHEST ABDOMEN PELVIS	1/19/2010 9:11	48	White	M	123	71	DOD normotensive
3196	0:48:42	CT THORAX W IV CONTRAST	3/18/2010 23:13	38	White	M	136	92	DOD normotensive
3203	5:40:43	CHEST ABDOMEN PELVIS	5/8/2009 4:04	19	White	F	125	79	DOD normotensive
3211	0:36:59	CHEST ABDOMEN PELVIS	4/24/2009 13:33	18	White	F	110	96	DOD normotensive
3226	3:34:34	CT ABDOMEN W IV CONTRA	4/16/2009 1:13	21	White	F	126	78	DOD normotensive
3227	0:57:31	CHEST ABDOMEN PELVIS	4/14/2009 2:10	21	White	M	140	90	DOD normotensive
3237	0:46:03	CHEST ABDOMEN PELVIS	4/4/2009 20:36	50	Black	F	204	68	DOD normotensive
3238	0:35:36	CHEST ABDOMEN PELVIS	4/2/2009 13:10	37	White	F	120	87	DOD normotensive
3240	12:54:04	CT ABDOMEN W IV CONTRA	3/27/2009 12:57	46	White	M	144	80	DOD normotensive
3244	1:00:43	CHEST ABDOMEN PELVIS	3/22/2009 12:09	35	White	F	135	100	DOD normotensive
3247	0:47:55	CHEST ABDOMEN PELVIS	3/23/2009 1:13	36	White	F	110	124	DOD normotensive
3258	0:38:25	CT THORAX W IV CONTRAS	3/10/2009 12:44	50	Black	M	229	83	DOD normotensive
3261	1:33:43	chest abdomen pelvis	3/8/2009 3:13	21	Black	M	137	84	DOD normotensive
3264	0:31:49	CHEST ABDOMEN PELVIS	3/5/2009 22:33	19	White	M	135	87	DOD normotensive
3265	0:33:06	CT ABDOMEN W IV CONTRA	3/5/2009 15:41	40	Black	M	162	70	DOD normotensive
3270	2:13:03	CT ABDOMEN W IV CONTRA	2/26/2009 11:32	45	White	F	124	84	DOD normotensive
3271	0:46:38	CHEST ABDOMEN PELVIS	2/24/2009 17:29	28	White	F	132	94	DOD normotensive
3282	0:36:11	CHEST ABDOMEN PELVIS	2/7/2009 12:35	20	White	M	145	67	DOD normotensive
3284	0:59:53	CHEST ABDOMEN PELVIS	2/7/2009 0:25	39	Black	M	149	100	DOD normotensive
3285	0:52:54	CHEST ABDOMEN PELVIS	2/6/2009 12:15	35	White	F	152	67	DOD normotensive
3286	0:43:13	CHEST ABDOMEN PELVIS	2/1/2009 18:03	21	White	F	147	105	DOD normotensive
3287	0:35:27	CT THORAX W IV CONTRAS	1/29/2009 18:35	27	White	M	139	77	DOD normotensive
3297	1:14:44	CHEST ABDOMEN PELVIS	1/19/2009 9:26	37	Black	M	145	62	DOD normotensive
3303	0:59:41	CHEST ABDOMEN PELVIS	1/11/2009 14:41	31	Asian	M	148	70	DOD normotensive
3304	0:42:12	CHEST ABDOMEN PELVIS	1/8/2009 17:31	49	White	M	128	75	DOD normotensive
3307	2:47:54	CT ABDOMEN W IV CONTRA	1/7/2009 0:58	18	Black	M	195	97	DOD normotensive
3313	0:41:04	CHEST ABDOMEN PELVIS	12/15/2008 11:36	48	White	M	123	74	DOD normotensive
3316	3:50:48	CHEST ABDOMEN PELVIS	12/14/2008 18:16	40	White	M	169	69	DOD normotensive
3322	0:30:11	CHEST ABDOMEN PELVIS	12/7/2008 8:55	29	White	M	147	86	DOD normotensive
3372	1:36:25	CHEST ABDOMEN PELVIS	1/23/2004 10:02	50	White	M	145	93	DOD normotensive
3379	0:47:24	CT THORAX W IV CONTRAST	12/6/2008 2:47	36	White	F	128	65	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
3392	0:55:49	CHEST ABDOMEN PELVIS	12/4/2008 21:17	23	White	M	149	99	DOD normotensive
3394	6:45:28	CHEST ABDOMEN PELVIS	12/1/2008 21:47	19	White	F	126	83	DOD normotensive
3405	0:57:07	CHEST ABDOMEN PELVIS	11/24/2008 23:05	29	White	M	149	89	DOD normotensive
3424	1:27:47	CHEST ABDOMEN PELVIS	11/22/2008 3:42	44	Black	M	137	83	DOD normotensive
3425	0:38:46	CHEST ABDOMEN PELVIS	11/22/2008 5:57	43	White	F	141	64	DOD normotensive
3426	4:19:18	CT THORAX W IV CONTRAST	11/22/2008 6:33	40	Black	M	131	93	DOD normotensive
3427	0:56:14	CHEST ABDOMEN PELVIS	11/22/2008 21:01	47	White	M	125	90	DOD normotensive
3428	3:33:50	CHEST ABDOMEN PELVIS	11/18/2008 22:18	28	White	F	140	72	DOD normotensive
3431	1:11:01	CHEST ABDOMEN PELVIS	11/17/2008 9:11	32	White	M	139	79	DOD normotensive
3433	0:45:28	CT THORAX W IV CONTRAST	11/16/2008 2:56	23	Black	M	152	64	DOD normotensive
3434	0:37:38	CT THORAX W IV CONTRAST	11/16/2008 4:52	22	Black	M	156	90	DOD normotensive
3439	0:52:40	CHEST ABDOMEN PELVIS	11/10/2008 9:32	49	White	F	127	53	DOD normotensive
3446	0:55:32	CHEST ABDOMEN PELVIS	11/6/2008 18:41	44	White	M	159	89	DOD normotensive
3455	0:55:38	CHEST ABDOMEN PELVIS	10/26/2008 1:46	38	White	M	130	36	DOD normotensive
3505	0:22:02	CHEST ABDOMEN PELVIS	10/12/2008 9:30	21	White	M	134	66	DOD normotensive
3508	0:44:52	CHEST ABDOMEN PELVIS	10/12/2008 1:10	32	White	M	129	94	DOD normotensive
3512	0:29:19	CT THORAX W IV CONTRAS	10/11/2008 19:40	48	White	M	140	76	DOD normotensive
3513	0:38:12	CT THORAX W IV CONTRAS	10/9/2008 13:42	47	White	M	153	82	DOD normotensive
3514	0:55:26	CHEST ABDOMEN PELVIS	10/9/2008 10:36	47	White	M	149	62	DOD normotensive
3983	5:17:04	CHEST ABDOMEN PELVIS	10/9/2008 18:42	29	White	F	118	90	DOD normotensive
3985	0:41:39	CHEST ABDOMEN PELVIS	10/5/2008 2:19	31	White	M	135	88	DOD normotensive
3987	3:13:12	CHEST ABDOMEN PELVIS	10/3/2008 17:36	40	White	M	132	77	DOD normotensive
4346	0:38:30	CHEST ABDOMEN PELVIS	9/29/2008 3:03	25	White	M	150	90	DOD normotensive
4355	0:43:45	CHEST ABDOMEN PELVIS	9/27/2008 3:09	48	White	M	148	86	DOD normotensive
4371	0:48:49	CHEST ABDOMEN PELVIS	9/2/2008 17:25	33	White	M	135	78	DOD normotensive
4375	1:18:23	CT THORAX W IV CONTRAS	8/30/2008 1:19	49	White	F	140	90	DOD normotensive
4376	0:48:42	CHEST ABDOMEN PELVIS	8/28/2008 19:57	46	White	M	168	86	DOD normotensive
4380	0:40:13	CHEST ABDOMEN PELVIS	8/29/2008 12:13	24	White	M	136	90	DOD normotensive
4383	0:58:01	CHEST ABDOMEN PELVIS	8/23/2008 12:29	48	White	F	148	63	DOD normotensive
4385	0:49:00	CHEST ABDOMEN PELVIS	8/21/2008 19:59	47	White	M	150	92	DOD normotensive
6957	0:44:01	CHEST ABDOMEN PELVIS	8/16/2008 4:48	24	White	M	136	93	DOD normotensive
6959	3:50:34	CHEST ABDOMEN PELVIS	8/15/2008 17:44	46	White	M	164	95	DOD normotensive
6966	0:35:42	CHEST ABDOMEN PELVIS	8/10/2008 11:03	25	White	M	146	78	DOD normotensive
6997	0:54:50	CT THORAX W IV CONTRAS	8/9/2008 12:01	38	White	M	145	68	DOD normotensive
6998	0:39:12	CT ABDOMEN W IV CONTRAST	8/9/2008 5:22	25	Hispanic	M	175	98	DOD normotensive
7000	0:41:21	CHEST ABDOMEN PELVIS	8/8/2008 3:33	37	Black	M	138	93	DOD normotensive
7002	3:33:00	CHEST ABDOMEN PELVIS	8/4/2008 16:31	38	White	M	152	91	DOD normotensive
7009	0:37:58	CT THORAX W IV CONTRAS	7/30/2008 16:42	22	White	M	135	81	DOD normotensive
7010	0:43:16	CHEST ABDOMEN PELVIS	7/30/2008 4:42	47	Black	M	157	98	DOD normotensive
7013	0:54:27	CHEST ABDOMEN PELVIS	7/27/2008 3:31	32	White	F	113	74	DOD normotensive
7016	0:46:23	CT THORAX W IV CONTRAS	7/26/2008 11:37	21	White	M	133	91	DOD normotensive
7020	0:57:59	CHEST ABDOMEN PELVIS	7/30/2008 23:42	45	White	F	128	86	DOD normotensive
7034	0:53:03	CHEST ABDOMEN PELVIS	7/4/2008 21:56	46	White	M	128	57	DOD normotensive
7036	0:41:47	CHEST ABDOMEN PELVIS	7/1/2008 18:37	19	White	M	113	83	DOD normotensive
7037	3:37:04	CHEST ABDOMEN PELVIS	7/1/2008 14:02	50	White	M	129	61	DOD normotensive
7048	9:38:27	CHEST ABDOMEN PELVIS	6/25/2008 23:47	43	White	M	127	89	DOD normotensive
7050	0:42:11	CHEST ABDOMEN PELVIS	6/22/2008 20:22	29	White	F	142	90	DOD normotensive
7809	1:35:44	CHEST ABDOMEN PELVIS	6/22/2008 22:17	45	White	M	138	73	DOD normotensive
7810	0:36:32	CHEST ABDOMEN PELVIS	6/21/2008 1:05	24	White	M	137	93	DOD normotensive
7818	0:35:28	CHEST ABDOMEN PELVIS	6/19/2008 15:03	20	White	M	133	66	DOD normotensive
7822	8:13:06	CHEST ABDOMEN PELVIS	6/16/2008 5:23	28	White	F	132	74	DOD normotensive
7826	5:07:32	CHEST ABDOMEN PELVIS	6/11/2008 12:41	25	White	M	177	79	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
7828	3:48:58	CT THORAX W IV CONTRAS	6/10/2008 7:28	38	White	M	156	87	DOD normotensive
7830	2:58:11	CHEST ABDOMEN PELVIS	4/6/2008 23:18	22	Black	M	151	73	DOD normotensive
7832	0:30:57	CHEST ABDOMEN PELVIS	6/1/2008 13:06	28	White	M	156	85	DOD normotensive
7837	1:55:48	CHEST ABDOMEN PELVIS	6/9/2008 18:21	37	White	M	140	71	DOD normotensive
7840	1:02:15	CT THORAX W IV CONTRAS	6/8/2008 10:35	50	Black	M	142	76	DOD normotensive
7845	3:09:25	CHEST ABDOMEN PELVIS	5/25/2008 21:17	49	Black	F	148	115	DOD normotensive
7846	1:28:08	CHEST ABDOMEN PELVIS	5/25/2008 5:21	24	White	M	132	87	DOD normotensive
7850	0:49:20	CHEST ABDOMEN PELVIS	5/23/2008 2:05	32	White	F	129	110	DOD normotensive
7865	3:00:25	CHEST ABDOMEN PELVIS	5/10/2008 7:49	36	White	M	138	98	DOD normotensive
7867	0:37:20	CHEST ABDOMEN PELVIS	5/10/2008 22:53	23	White	M	139	90	DOD normotensive
7872	5:26:06	CHEST ABDOMEN PELVIS	5/5/2008 22:49	19	White	M	135	77	DOD normotensive
7875	0:50:19	CT THORAX W IV CONTRAS	5/4/2008 4:03	27	White	M	127	91	DOD normotensive
7884	0:50:59	CHEST ABDOMEN PELVIS	4/30/2008 17:58	49	White	M	162	78	DOD normotensive
7887	0:34:36	CHEST ABDOMEN PELVIS	4/25/2008 3:52	43	White	M	125	83	DOD normotensive
7888	0:59:36	CT THORAX W IV CONTRAS	4/25/2008 0:33	50	White	M	157	83	DOD normotensive
7889	3:01:46	CHEST ABDOMEN PELVIS	4/27/2008 20:49	21	White	M	158	73	DOD normotensive
7890	1:04:11	CHEST ABDOMEN PELVIS	4/28/2008 15:14	19	White	M	134	83	DOD normotensive
7891	0:42:47	CHEST ABDOMEN PELVIS	4/22/2008 9:58	46	White	M	198	92	DOD normotensive
7892	1:14:04	CT THORAX W IV CONTRAS	4/22/2008 22:07	25	White	M	139	91	DOD normotensive
7894	1:34:33	CHEST ABDOMEN PELVIS	4/21/2008 9:19	20	White	M	177	99	DOD normotensive
7897	0:52:51	CHEST ABDOMEN PELVIS	4/19/2008 12:29	26	White	F	146	93	DOD normotensive
7902	0:42:44	CHEST ABDOMEN PELVIS	4/12/2008 14:57	21	White	M	161	75	DOD normotensive
7905	1:18:54	CHEST ABDOMEN PELVIS	4/6/2008 2:21	38	Hispanic	M	150	71	DOD normotensive
7914	0:31:38	CHEST ABDOMEN PELVIS	3/23/2008 0:30	47	White	M	136	98	DOD normotensive
7917	0:41:08	CHEST ABDOMEN PELVIS	3/20/2008 16:31	31	White	M	136	85	DOD normotensive
7919	0:58:53	CHEST ABDOMEN PELVIS	3/19/2008 3:16	43	White	M	138	96	DOD normotensive
7920	0:47:00	CHEST ABDOMEN PELVIS	3/15/2008 12:42	20	White	M	149	100	DOD normotensive
7922	0:30:33	CHEST ABDOMEN PELVIS	3/14/2008 10:45	38	Hispanic	M	127	97	DOD normotensive
7923	5:31:06	CHEST ABDOMEN PELVIS	3/5/2008 1:26	31	White	M	134	98	DOD normotensive
7925	10:28:11	CHEST ABDOMEN PELVIS	3/10/2008 15:04	31	White	M	140	88	DOD normotensive
7927	2:14:51	CHEST ABDOMEN PELVIS	3/16/2008 18:52	19	Hispanic	M	144	98	DOD normotensive
7929	0:35:16	CHEST ABDOMEN PELVIS	2/29/2008 20:13	41	White	M	132	83	DOD normotensive
7930	0:38:42	CT THORAX W IV CONTRAS	2/26/2008 22:00	34	White	F	151	84	DOD normotensive
7931	1:03:47	CHEST ABDOMEN PELVIS	2/25/2008 13:40	43	Hispanic	M	154	78	DOD normotensive
7933	0:35:53	CHEST ABDOMEN PELVIS	2/26/2008 10:51	43	White	M	156	87	DOD normotensive
7940	0:45:07	CHEST ABDOMEN PELVIS	2/19/2008 23:30	30	White	M	158	119	DOD normotensive
7942	0:53:21	CHEST ABDOMEN PELVIS	2/10/2008 2:24	25	White	M	150	93	DOD normotensive
7949	1:41:59	CT THORAX W IV CONTRAS	2/5/2008 23:40	22	Black	M	145	85	DOD normotensive
7952	0:39:34	CHEST ABDOMEN PELVIS	2/2/2008 9:16	39	White	F	117	117	DOD normotensive
7954	3:04:45	CHEST ABDOMEN PELVIS	2/1/2008 23:26	45	White	M	152	87	DOD normotensive
7955	0:24:34	CHEST ABDOMEN PELVIS	2/1/2008 12:32	21	Black	M	134	86	DOD normotensive
7960	0:42:29	CT THORAX W IV CONTRAS	3/12/2008 20:06	19	White	M	154	80	DOD normotensive
7965	0:24:02	CHEST ABDOMEN PELVIS	1/20/2008 8:27	21	White	M	115	82	DOD normotensive
7969	0:45:53	CHEST ABDOMEN PELVIS	1/18/2008 0:17	36	White	M	132	96	DOD normotensive
7980	0:48:06	CHEST ABDOMEN PELVIS	1/1/2008 17:48	41	Black	F	221	72	DOD normotensive
7990	1:57:31	CHEST ABDOMEN PELVIS	12/20/2007 2:19	44	White	M	166	100	DOD normotensive
7992	0:51:10	CHEST ABDOMEN PELVIS	12/20/2007 12:46	40	Black	F	131	67	DOD normotensive
7995	2:21:55	CHEST ABDOMEN PELVIS	12/17/2007 1:34	38	White	F	143	85	DOD normotensive
7996	0:58:10	CHEST ABDOMEN PELVIS	12/15/2007 3:11	25	White	M	121	68	DOD normotensive
8009	0:47:46	CHEST ABDOMEN PELVIS	5/11/2008 10:04	24	White	M	149	76	DOD normotensive
8863	0:57:18	CHEST ABDOMEN PELVIS	12/13/2007 5:43	21	White	M	140	96	DOD normotensive
8864	1:07:01	CHEST ABDOMEN PELVIS	12/13/2007 6:30	44	White	M	145	88	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
8866	0:54:25	CHEST ABDOMEN PELVIS	12/12/2007 4:38	36	Hispanic	M	140	97	DOD normotensive
8868	1:20:56	CHEST ABDOMEN PELVIS	12/11/2007 3:42	38	Black	M	183	80	DOD normotensive
8873	0:41:12	CHEST ABDOMEN PELVIS	12/7/2007 18:31	23	White	F	118	86	DOD normotensive
8875	0:45:05	CHEST ABDOMEN PELVIS	12/6/2007 14:08	25	Black	M	150	88	DOD normotensive
8877	0:56:29	CHEST ABDOMEN PELVIS	12/4/2007 18:15	21	White	M	122	94	DOD normotensive
8879	2:07:10	CHEST ABDOMEN PELVIS	12/3/2007 10:30	19	White	F	125	84	DOD normotensive
8881	8:56:08	CHEST ABDOMEN PELVIS	12/1/2007 17:23	45	Hispanic	M	139	51	DOD normotensive
8894	0:33:15	CHEST ABDOMEN PELVIS	11/11/2007 18:04	18	White	M	159	78	DOD normotensive
8895	0:49:28	CHEST ABDOMEN PELVIS	11/11/2007 2:46	19	White	M	157	84	DOD normotensive
8898	0:48:09	CHEST ABDOMEN PELVIS	11/1/2007 14:22	44	White	F	127	85	DOD normotensive
8908	6:50:08	CHEST ABDOMEN PELVIS	10/22/2007 3:09	48	White	M	100	51	DOD normotensive
8915	0:44:20	CHEST ABDOMEN PELVIS	10/7/2007 18:23	33	White	M	142	70	DOD normotensive
8918	22:16:44	CHEST ABDOMEN PELVIS	10/10/2007 4:28	36	Black	M	142	84	DOD normotensive
8923	1:15:57	CHEST ABDOMEN PELVIS	9/30/2007 19:15	39	Other	M	120	71	DOD normotensive
8925	0:37:39	CHEST ABDOMEN PELVIS	9/29/2007 11:29	25	White	F	130	100	DOD normotensive
8926	1:03:13	CT THORAX W IV CONTRAS	9/29/2007 6:07	33	White	M	119	68	DOD normotensive
8934	0:40:00	CT THORAX W IV CONTRAS	9/22/2007 19:53	36	White	M	154	85	DOD normotensive
8937	0:53:55	CHEST ABDOMEN PELVIS	9/21/2007 9:33	36		F	149	78	DOD normotensive
8944	0:45:49	CHEST ABDOMEN PELVIS	9/19/2007 19:26	45	White	M	145	76	DOD normotensive
8946	0:50:34	CHEST ABDOMEN PELVIS	9/17/2007 19:00	25	White	M	155	80	DOD normotensive
8951	0:54:53	CHEST ABDOMEN PELVIS	9/16/2007 2:14	20	White	M	136	84	DOD normotensive
8953	0:51:28	CHEST ABDOMEN PELVIS	9/12/2007 9:19	20	White	F	149	85	DOD normotensive
9111	0:37:20	CHEST ABDOMEN PELVIS	9/9/2007 19:30	24	White	M	140	87	DOD normotensive
9116	0:54:29	CHEST ABDOMEN PELVIS	9/5/2007 22:08	28	Black	F	156	94	DOD normotensive
9118	1:01:46	CHEST ABDOMEN PELVIS	9/6/2007 0:25	32	White	M	135	89	DOD normotensive
9120	0:37:40	CT THORAX W IV CONTRAS	9/3/2007 5:31	30	White	M	96	43	DOD normotensive
9124	2:59:24	CHEST ABDOMEN PELVIS	9/1/2007 23:48	49	White	F	144	78	DOD normotensive
9125	1:46:35	CHEST ABDOMEN PELVIS	9/1/2007 18:31	29	Asian	M	120	92	DOD normotensive
9127	2:17:12	CHEST ABDOMEN PELVIS	8/31/2007 19:42	23	Asian	F	125	66	DOD normotensive
9129	2:19:27	CHEST ABDOMEN PELVIS	8/27/2007 19:04	24	Asian	M	134	86	DOD normotensive
9136	0:33:15	CHEST ABDOMEN PELVIS	8/23/2007 22:41	19	White	M	188	99	DOD normotensive
9143	1:44:09	CHEST ABDOMEN PELVIS	8/19/2007 1:07	36	White	M	140	92	DOD normotensive
9145	0:49:33	CHEST ABDOMEN PELVIS	8/16/2007 16:19	22	White	M	181	76	DOD normotensive
9147	0:47:59	CHEST ABDOMEN PELVIS	8/15/2007 16:41	20	White	M	157	65	DOD normotensive
9149	1:05:34	CHEST ABDOME PELVIS	8/13/2007 14:19	25	White	M	121	59	DOD normotensive
9153	0:55:42	CHEST ABDOMEN PELVIS	8/12/2007 8:15	19	White	M	122	103	DOD normotensive
9156	0:47:36	CHEST ABDOMEN PELVIS	8/11/2007 16:10	45	White	M	175	71	DOD normotensive
9165	0:50:00	CT THORAX W IV CONTRAS	8/3/2007 1:30	30	Other	M	159	71	DOD normotensive
9170	1:15:57	CHEST ABDOMEN PELVIS	7/30/2007 2:48	18	White	M	118	66	DOD normotensive
9173	0:46:59	CHEST ABDOMEN PELVIS	7/28/2007 19:51	33	White	M	173	90	DOD normotensive
9179	0:58:44	CHEST ABDOMEN PELVIS	7/27/2007 0:34	49	White	M	162	70	DOD normotensive
9181	0:42:49	CHEST ABDOMEN PELVIS	7/24/2007 4:08	48	White	M	170	82	DOD normotensive
9184	1:16:53	CHEST ABDOMEN PELVIS	7/21/2007 20:04	18	White	M	149	82	DOD normotensive
9186	1:04:21	CHEST ABDOMEN PELVIS	7/22/2007 17:19	38	White	M	138	85	DOD normotensive
9187	0:52:20	CHEST ABDOMEN PELVIS	7/15/2007 19:25	45	White	M	169	76	DOD normotensive
9189	0:52:49	CT THORAX W IV CONTRAS	7/16/2007 19:09	45	White	M	140	98	DOD normotensive
9191	0:36:55	CHEST ABDOMEN PELVIS	7/20/2007 14:19	26	White	M	131	82	DOD normotensive
9194	1:03:27	CHEST ABDOMEN PELVIS	7/15/2007 2:21	35	Asian	M	141	88	DOD normotensive
9195	3:54:01	CHEST ABDOMEN PELVIS	7/18/2007 15:02	44	White	F	122	81	DOD normotensive
9200	0:29:35	CHEST ABDOMEN PELVIS	7/12/2007 13:33	19	White	M	159	74	DOD normotensive
9203	1:14:41	CHEST ABDOMEN PELVIS	7/1/2007 12:58	49	White	M	139	83	DOD normotensive
9214	1:15:13	CHEST ABDOMEN PELVIS	6/26/2007 15:35	19	White	M	149	60	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
9216	0:54:34	CHEST ABDOMEN PELVIS	7/4/2007 21:01	32	White	M	132	75	DOD normotensive
9217	1:55:25	CHEST ABDOMEN PELVIS	6/20/2007 18:37	36	White	M	138	89	DOD normotensive
9218	1:07:21	CHEST ABDOMEN PELVIS	7/4/2007 17:57	32	Other	F	156	75	DOD normotensive
9223	1:13:08	CT THORAX W IV CONTRAS	6/29/2007 0:22	25	Black	M	154	78	DOD normotensive
9230	0:44:45	CT THORAX W IV CONTRAS	6/23/2007 21:17	18		M	157	99	DOD normotensive
9232	5:08:35	CHEST ABDOMEN PELVIS	6/22/2007 17:56	19	White	M	144	95	DOD normotensive
9234	1:06:38	CHEST ABDOMEN PELVIS	6/22/2007 8:27	37	White	M	155	61	DOD normotensive
9235	1:09:08	CHEST ABDOMEN PELVIS	6/21/2007 23:49	20	White	M	132	81	DOD normotensive
9237	1:01:15	CHEST ABDOMEN PELVIS	6/21/2007 18:16	36		M	146	89	DOD normotensive
9244	0:58:14	CHEST ABDOMEN PELVIS	6/19/2007 3:36	44	White	M	153	94	DOD normotensive
9250	0:44:21	CHEST ABDOMEN PELVIS	6/16/2007 17:51	48	White	M	142	76	DOD normotensive
9251	1:01:25	CHEST ABDOMEN PELVIS	6/16/2007 20:45	43	White	M	140	81	DOD normotensive
9258	1:07:19	CHEST ABDOMEN PELVIS	6/11/2007 4:22	48	White	M	170	75	DOD normotensive
9260	0:59:38	CT THORAX W IV CONTRAS	6/7/2007 10:44	21	Other	F	127	83	DOD normotensive
9261	0:44:57	CHEST ABDOMEN PELVIS	6/6/2007 19:37	49	White	M	156	99	DOD normotensive
9267	1:25:51	CHEST ABDOMEN PELVIS	6/2/2007 22:08	50	White	M	156	76	DOD normotensive
9268	1:17:13	CT THORAX W IV CONTRAS	5/31/2007 14:53	30	White	M	137	92	DOD normotensive
9269	1:03:16	CHEST ABDOMEN PELVIS	5/31/2007 21:13	43	White	M	138	75	DOD normotensive
9273	1:21:42	CT THORAX W IV CONTRAS	5/27/2007 17:51	50	White	F	137	77	DOD normotensive
9275	1:14:29	CHEST ABDOMEN PELVIS	5/27/2007 23:44	35	White	M	130	96	DOD normotensive
9279	0:41:42	CT THORAX W IV CONTRAS	5/21/2007 23:14	23	White	M	151	91	DOD normotensive
9280	1:00:54	CHEST ABDOMEN PELVIS	5/20/2007 10:42	21	White	F	128	75	DOD normotensive
9281	1:00:24	CHEST ABDOMEN PELVIS	5/20/2007 17:38	19	White	M	135	100	DOD normotensive
9282	0:41:30	CHEST ABDOMEN PELVIS	5/20/2007 3:52	44	White	M	131	90	DOD normotensive
9290	0:51:04	CHEST ABDOMEN PELVIS	5/14/2007 17:28	19	White	M	148	88	DOD normotensive
9292	1:37:24	CT THORAX W IV CONTRAS	5/15/2007 1:17	40	White	F	127	88	DOD normotensive
9293	1:09:40	CHEST ABDOMEN PELVIS	5/13/2007 5:13	22	White	M	144	95	DOD normotensive
9297	0:56:24	CHEST ABDOMEN PELVIS	5/6/2007 3:58	31	White	M	146	90	DOD normotensive
9301	0:47:45	CHEST ABDOMEN PELVIS	5/3/2007 3:30	26	White	M	163	120	DOD normotensive
9307	1:00:27	CHEST ABDOMEN PELVIS	5/1/2007 9:16	45	White	F	158	100	DOD normotensive
9324	0:47:48	CHEST ABDOMEN PELVIS	4/12/2007 18:29	18	White	M	146	83	DOD normotensive
9335	0:36:11	CHEST ABDOMEN PELVIS	3/30/2007 20:56	46	White	M	135	78	DOD normotensive
9337	0:49:03	CHEST ABDOMEN PELVIS	3/27/2007 14:44	29	White	M	150	87	DOD normotensive
9357	1:23:52	CHEST ABDOMEN PELVIS	3/3/2007 2:40	47	White	M	155	80	DOD normotensive
9362	1:21:20	CHEST ABDOMEN PELVIS	2/27/2007 17:34	19	White	M	134	70	DOD normotensive
9429	3:33:40	CHEST ABDOMEN PELVIS	2/17/2007 5:00	48	White	M	158	84	DOD normotensive
9434	0:49:39	CT THORAX W IV CONTRAS	2/10/2007 17:02	39	White	M	142	64	DOD normotensive
9442	1:02:19	CT THORAX W IV CONTRAS	1/30/2007 7:08	20	White	M	136	76	DOD normotensive
9445	2:01:45	CHEST ABDOMEN PELVIS	1/27/2007 5:14	23	White	M	122	76	DOD normotensive
9452	1:20:01	CHEST ABDOMEN PELVIS	1/23/2007 0:30	21	White	M	150	97	DOD normotensive
9458	1:18:07	CHEST ABDOMEN PELVIS	1/18/2007 3:00	33	White	M	174	100	DOD normotensive
9463	0:46:05	CHEST ABDOMEN PELVIS	1/12/2007 20:15	21	White	M	133	80	DOD normotensive
9485	1:24:41	CT ABDOMEN W IV CONTRA	12/14/2006 12:34	43	Black	M	137	88	DOD normotensive
9487	3:31:42	CHEST ABDOMEN PELVIS	12/13/2006 18:52	23	White	M	141	91	DOD normotensive
9497	1:16:00	CHEST ABDOMEN PELVIS	12/5/2006 21:41	26	White	M	133	85	DOD normotensive
9498	1:39:17	CHEST ABDOMEN PELVIS	12/2/2006 3:32	19	White	M	137	91	DOD normotensive
9499	1:22:37	CHEST ABDOMEN PELVIS	12/1/2006 2:04	19	White	M	172	80	DOD normotensive
9514	0:22:02	CHEST ABDOMEN PELVIS	5/28/2006 5:06	21	White	M	156	99	DOD normotensive
9515	1:09:52	CHEST ABDOMEN PELVIS	5/28/2006 14:14	45	White	M	136	80	DOD normotensive
9521	1:23:32	CHEST ABDOMEN PELVIS	5/24/2006 12:35	35	White	M	152	84	DOD normotensive
9524	10:40:30	CHEST ABDOMEN PELVIS	5/24/2006 7:25	18	White	F	160	95	DOD normotensive
9525	1:06:20	CHEST ABDOMEN PELVIS	5/24/2006 0:56	31	White	M	120	83	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
9528	0:53:29	CT ABDOMEN W IV CONTRA	5/16/2006 2:20	34	Hispanic	M	130	100	DOD normotensive
9533	0:51:13	CHEST ABDOMEN PELVIS	5/9/2006 20:21	36	White	M	139	87	DOD normotensive
9534	5:29:15	chest abdomen pelvis	5/9/2006 8:01	27	White	M	132	74	DOD normotensive
9540	6:43:08	CHEST ABDOMEN PELVIS	5/7/2006 21:29	49	White	F	143	89	DOD normotensive
9541	1:21:08	CHEST ABDOMEN PELVIS	5/7/2006 17:11	47	Hispanic	M	126	78	DOD normotensive
9542	1:46:59	CHEST ABDOMEN PELVIS	5/7/2006 23:01	47	White	M	149	98	DOD normotensive
9556	1:54:08	CHEST ABDOMEN PELVIS	4/7/2006 18:52	30	White	M	120	59	DOD normotensive
10543	0:27:12	CT THORAX W IV CONTRAST	7/2/2009 23:06	48	White	M	160	88	DOD normotensive
10546	1:47:54	CT THORAX W IV CONTRAST	8/12/2009 19:12	47	White	F	141	84	DOD normotensive
10552	1:32:47	CT THORAX W IV CONTRAST	8/19/2009 0:32	25	White	M	144	60	DOD normotensive
10815	0:34:56	CT THORAX W IV CONTRAST	9/9/2009 10:36	35	White	M	123	88	DOD normotensive
10820	0:46:44	CT ABDOMEN W IV CONTRAST	9/29/2009 17:10	35	White	M	153	93	DOD normotensive
10824	0:51:44	CT ABDOMEN W IV CONTRAST	10/18/2009 17:53	39	White	M	159	84	DOD normotensive
10825	0:25:19	CT THORAX W IV CONTRAST	10/19/2009 20:15	36	White	M	154	97	DOD normotensive
10883	0:33:26	CT THORAX W IV CONTRAST	7/21/2009 0:57	40	White	M	144	74	DOD normotensive
10886	0:48:39	CT THORAX W IV CONTRAST	7/19/2009 22:09	22	Hispanic	M	145	85	DOD normotensive
10889	0:27:34	CT THORAX W IV CONTRAST	7/24/2009 18:18	46	Black	M	165	78	DOD normotensive
10891	1:23:41	CT THORAX W IV CONTRAST	7/25/2009 6:30	24	Black	M	140	84	DOD normotensive
10894	4:58:07	CT THORAX W IV CONTRAST	12/10/2009 2:45	31	Other	M	147	80	DOD normotensive
10928	0:39:16	CT THORAX W IV CONTRAST	7/28/2009 12:06	31	White	M	197	83	DOD normotensive
10932	1:04:09	CT THORAX W IV CONTRAST	7/31/2009 12:43	30	Black	M	135	79	DOD normotensive
10934	0:36:20	CT THORAX W IV CONTRAST	1/5/2010 23:30	41	Hispanic	M	167	65	DOD normotensive
10937	0:44:36	CT ABDOMEN W IV CONTRAST	2/1/2010 16:29	45	White	M	138	94	DOD normotensive
10940	1:05:02	CT ABDOMEN W IV CONTRAST	2/13/2010 16:20	50	White	M	125	58	DOD normotensive
11126	1:15:13	CT THORAX W IV CONTRAST	3/28/2010 9:11	44	White	M	127	78	DOD normotensive
11312	3:31:53	CT THORAX WO IV CONTRAST	1/5/2010 0:00	48	White	F	120	95	DOD normotensive
11317	1:54:40	CT THORAX W IV CONTRAST	11/26/2009 15:42	46	White	M	147	59	DOD normotensive
11318	0:46:30	CT THORAX W IV CONTRAST	11/26/2009 14:33	24	White	M	135	72	DOD normotensive
11319	0:36:36	CT ABDOMEN W IV CONTRAST	11/27/2009 18:19	21	White	M	146	72	DOD normotensive
11320	0:56:33	CT THORAX W IV CONTRAST	10/1/2009 10:45	20	White	F	129	87	DOD normotensive
11323	1:33:00	CT THORAX W IV CONTRAST	2/26/2010 9:59	32	White	M	147	89	DOD normotensive
11324	1:04:46	CT THORAX WO IV CONTRAST	7/4/2010 17:27	49	White	M	124	86	DOD normotensive
11326	1:01:10	CT THORAX W IV CONTRAST	11/24/2009 18:53	24	Black	M	142	98	DOD normotensive
11368	0:30:57	CT THORAX W IV CONTRAST	6/1/2008 13:06	28	White	M	156	85	DOD normotensive
11371	1:20:56	CT THORAX W IV CONTRAST	12/11/2007 3:42	38	Black	M	183	80	DOD normotensive
11375	0:54:29	CT THORAX W IV CONTRAST	9/5/2007 22:08	28	Black	F	156	94	DOD normotensive
11387	4:21:12	CT ABDOMEN W IV CONTRAST	4/17/2010 17:58	22	White	M	164	92	DOD normotensive
11388	0:36:56	CT ABDOMEN W IV CONTRAST	4/18/2010 11:24	35	Asian	F	149	72	DOD normotensive
11402	0:39:47	CT ABDOMEN W IV CONTRAST	4/23/2010 20:42	50	White	M	160	79	DOD normotensive
11440	1:01:33	CT THORAX W IV CONTRAST	5/1/2010 8:26	46	White	M	186	81	DOD normotensive
11524	0:36:35	CT ABDOMEN W IV CONTRAST	9/4/2010 16:58	21	White	M	156	65	DOD normotensive
11569	3:15:11	CT THORAX W IV CONTRAST	5/27/2010 11:49	38	White	F	137	80	DOD normotensive
11576	0:14:11	CT ABDOMEN W IV CONTRAST	6/1/2010 16:13	23	White	M	146	88	DOD normotensive
11577	14:27:18	CT ABDOMEN W IV CONTRAST	6/6/2010 22:24	45	White	F	145	80	DOD normotensive
11580	0:53:42	CT ABDOMEN W IV CONTRAST	6/12/2010 23:15	22	White	M	143	80	DOD normotensive
11602	0:46:07	ABDOMEN	11/28/2004 18:56	22	White	M	158	96	DOD normotensive
11624	1:54:51	CT ABDOMEN WO IV CONTRAST	10/26/2009 18:36	29	White	M	165	83	DOD normotensive
11627	0:43:25	CT ABDOMEN W IV CONTRAST	9/13/2009 0:35	37	White	M	145	68	DOD normotensive
11634	0:33:45	CT THORAX W IV CONTRAST	8/21/2009 13:49	18	White	M	128	75	DOD normotensive
11635	0:50:03	CT THORAX W IV CONTRAST	8/21/2009 14:23	19	White	M	149	77	DOD normotensive
11649	1:08:26	CHEST ABDOMEN PELVIS	9/24/2003 18:21	18	White	M	176	87	DOD normotensive
11652	0:47:01	ABDOMEN	10/12/2002 1:39	20	White	M	138	89	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
12061	1:06:39	CHEST ABDOMEN PELVIS	3/21/2006 20:36	24	White	M	177	89	DOD normotensive
12064	0:51:11	CT THORAX W IV CONTRAS	3/14/2006 13:07	49	White	F	154	72	DOD normotensive
12070	2:02:04	CHEST ABDOMEN PELVIS	3/7/2006 5:24	41	White	M	175	100	DOD normotensive
12073	1:05:19	CHEST ABDOMEN PELVIS	3/5/2006 8:29	44	White	M	132	93	DOD normotensive
12079	0:55:15	CHEST ABDOMEN PELVIS	2/26/2006 3:34	23	White	M	149	90	DOD normotensive
12415	0:28:18	CT THORAX W IV CONTRAS	3/30/2006 20:28	44	White	M	152	89	DOD normotensive
12418	2:08:25	CT ABDOMEN W IV CONTRAST	2/5/2006 21:30	46	White	M	186	98	DOD normotensive
12434	2:29:10	CHEST ABDOMEN PELVIS	1/1/2006 14:49	23	White	M	149	100	DOD normotensive
12602	0:54:23	CHEST ABDOMEN PELVIS	1/18/2006 18:40	18	White	M	138	100	DOD normotensive
12776	2:33:07	CHEST ABDOMEN PELVIS	1/8/2006 13:59	32	White	M	137	74	DOD normotensive
12799	1:22:41	CHEST ABDOMEN PELVIS	11/26/2005 1:44	39	White	M	143	97	DOD normotensive
13041	0:57:53	CHEST ABDOMEN PELVIS	1/25/2006 19:58	29		M	126	97	DOD normotensive
13045	1:15:22	CHEST ABDOMEN PELVIS	1/22/2006 8:53	22	White	M	128	97	DOD normotensive
14515	0:51:35	CT THORAX W IV CONTRAST	6/12/2007 1:37	47	Black	M	197	82	DOD normotensive
15426	0:41:26	CT ABDOMEN W IV CONTRAST	4/9/2009 15:11	42	White	M	134	65	DOD normotensive
15432	0:41:39	CT THORAX W IV CONTRAST	10/5/2008 2:19	31	White	M	135	88	DOD normotensive
15498	1:21:03	CT THORAX W IV CONTRAST	5/23/2006 10:58	35	White	M	189	78	DOD normotensive
15642	0:49:34	CT ABDOMEN WO IV CONTRAST	11/7/2010 1:12	49	Other	M	129	87	DOD normotensive
15740	1:04:08	CHEST ABDOMEN PELVIS	6/24/2003 12:56	24	White	M	144	61	DOD normotensive
15755	2:31:44	CHEST	10/10/2004 20:16	46	White	M	141	93	DOD normotensive
15758	1:31:15	CHEST ABDOMEN PELVIS	6/16/2004 12:47	43	White	M	157	90	DOD normotensive
16017	1:08:20	CT THORAX W IV CONTRAST	6/30/2009 0:38	27	White	M	147	67	DOD normotensive
16022	1:21:46	CT THORAX W IV CONTRAST	8/8/2009 10:34	40	White	M	141	81	DOD normotensive
16024	0:28:50	CT ABDOMEN W IV CONTRAST	8/9/2009 20:26	46	White	M	153	75	DOD normotensive
16025	0:35:37	CT ABDOMEN W IV CONTRAST	8/15/2009 15:52	28	White	F	124	95	DOD normotensive
16026	1:51:38	CT ABDOMEN W IV CONTRAST	8/16/2009 10:43	30	White	F	128	89	DOD normotensive
16027	0:36:24	CT ABDOMEN W IV CONTRAST	8/18/2009 3:37	24	White	M	155	68	DOD normotensive
16029	0:54:39	CT ABDOMEN W IV CONTRAST	6/20/2010 15:48	49	White	F	138	73	DOD normotensive
16034	0:48:54	CT ABDOMEN W IV CONTRAST	6/2/2010 16:39	19	White	M	160	55	DOD normotensive
16035	0:43:53	CT ABDOMEN W IV CONTRAST	5/8/2010 13:05	27	White	F	165	79	DOD normotensive
16038	0:57:17	CT ABDOMEN W IV CONTRAST	4/29/2010 18:02	19	White	F	141	84	DOD normotensive
16044	0:25:47	CT ABDOMEN W IV CONTRAST	4/19/2010 11:18	25	White	M	122	88	DOD normotensive
16046	0:28:38	CT ABDOMEN W IV CONTRAST	4/15/2010 20:38	29	Black	M	150	79	DOD normotensive
16047	0:48:47	CT ABDOMEN W IV CONTRAST	4/15/2010 13:04	27	White	M	158	62	DOD normotensive
16048	1:52:09	CT ABDOMEN W IV CONTRAST	4/15/2010 13:42	29	White	M	144	94	DOD normotensive
16049	0:52:11	CT ABDOMEN W IV CONTRAST	4/12/2010 10:52	43	Black	F	148	97	DOD normotensive
16058	0:33:28	CT ABDOMEN W IV CONTRAST	5/24/2010 12:30	24	White	M	135	75	DOD normotensive
16060	0:44:49	CT ABDOMEN W IV CONTRAST	5/15/2010 15:03	32	White	F	137	88	DOD normotensive
16061	0:38:05	CT ABDOMEN W IV CONTRAST	5/14/2010 20:23	24	White	M	129	40	DOD normotensive
16067	2:39:56	CT ABDOMEN W IV CONTRAST	3/6/2010 6:57	26	White	M	135	85	DOD normotensive
16068	2:19:00	CT ABDOMEN W IV CONTRAST	2/28/2010 5:39	40	White	F	131	78	DOD normotensive
16069	1:12:24	CT ABDOMEN W IV CONTRAST	2/20/2010 13:02	20	Hispanic	M	134	78	DOD normotensive
16070	10:02:07	CT ABDOMEN W IV CONTRAST	8/15/2009 12:34	29	White	M	144	89	DOD normotensive
16071	0:38:13	CT ABDOMEN W IV CONTRAST	2/24/2010 21:58	50	White	M	180	94	DOD normotensive
16129	1:11:47	CT ABDOMEN W IV CONTRAST	2/19/2010 18:20	48	Black	M	168	68	DOD normotensive
16131	0:59:03	CT ABDOMEN W IV CONTRAST	2/11/2010 0:10	18	White	M	125	85	DOD normotensive
16134	0:30:58	CT ABDOMEN W IV CONTRAST	1/31/2010 15:27	38	White	M	162	88	DOD normotensive
16139	6:16:51	CT ABDOMEN W IV CONTRAST	1/20/2010 15:17	49	White	F	146	84	DOD normotensive
16140	17:55:09	CT ABDOMEN W IV CONTRAST	1/10/2010 20:42	46	White	M	125	79	DOD normotensive
16141	0:57:06	CT ABDOMEN W IV CONTRAST	1/10/2010 1:01	29	White	M	178	89	DOD normotensive
16153	3:46:00	CT ABDOMEN W IV CONTRAST	12/31/2009 21:27	23	White	M	163	93	DOD normotensive
16162	0:43:57	CT ABDOMEN W IV CONTRAST	12/26/2009 7:43	18	White	F	134	97	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
16173	0:40:02	CT ABDOMEN W IV CONTRAST	11/21/2009 0:30	19	Black	F	145	88	DOD normotensive
16174	0:26:42	CT ABDOMEN W IV CONTRAST	11/18/2009 10:23	19	White	M	142	85	DOD normotensive
16341	1:28:47	CHEST ABDOMEN PELVIS	10/17/2002 17:30	36	White	F	121	80	DOD normotensive
16878	0:59:36	CT THORAX W IV CONTRAST	8/26/2006 8:26	23	White	M	148	81	DOD normotensive
16879	1:02:17	CT THORAX W IV CONTRAST	10/29/2006 1:05	44	Black	M	130	98	DOD normotensive
16921	1:25:43	CT ABDOMEN W IV CONTRAST	6/12/2006 10:58	38	White	M	143	82	DOD normotensive
16927	1:12:02	CT THORAX W IV CONTRAST	4/9/2011 18:15	31	White	F	126	89	DOD normotensive
16928	1:04:03	CT ABDOMEN PELVIS W IV CONTRAST	4/2/2011 20:02	46	White	M	199	86	DOD normotensive
16930	0:33:38	CT THORAX W IV CONTRAST	2/5/2011 14:08	31	White	M	127	84	DOD normotensive
16931	13:11:22	CT ABDOMEN PELVIS W IV CONTRAST	1/30/2011 0:52	48	White	M	149	68	DOD normotensive
16933	0:40:32	CT THORAX W IV CONTRAST	1/1/2011 21:40	29	White	F	132	56	DOD normotensive
16944	6:21:35	CT ABDOMEN W IV CONTRAST	10/23/2010 1:34	42	White	M	152	93	DOD normotensive
16946	0:27:23	CT ABDOMEN W IV CONTRAST	9/27/2010 1:22	24	White	M	169	83	DOD normotensive
16947	3:15:16	CT THORAX W IV CONTRAST	9/7/2010 23:35	46	White	M	129	88	DOD normotensive
17034	1:09:36	CT THORAX W IV CONTRAST	3/24/2007 6:54	22	White	M	150	89	DOD normotensive
17036	3:16:28	CT ABDOMEN W IV CONTRAST	1/4/2010 23:46	46	White	M	123	83	DOD normotensive
17067	0:41:14	CT ABDOMEN W IV CONTRAST	7/14/2010 13:10	46	Hispanic	F	132	85	DOD normotensive
17077	0:25:09	CT ABDOMEN W IV CONTRAST	2/28/2010 7:52	48	White	M	130	80	DOD normotensive
17438	3:32:59	CT THORAX W IV CONTRAST	7/21/2010 10:15	26	White	M	131	91	DOD normotensive
17445	0:31:11	CT THORAX W IV CONTRAST	8/31/2010 13:44	40	Hispanic	M	136	76	DOD normotensive
17462	1:43:25	CT THORAX W IV CONTRAST	10/29/2006 20:36	47	White	M	131	77	DOD normotensive
17515	2:14:39	CT ABDOMEN W IV CONTRAST	11/8/2005 20:20	48	White	M	141	86	DOD normotensive
17556	0:51:14	CT ABDOMEN W IV CONTRAST	10/22/2005 8:40	20		M	136	91	DOD normotensive
17576	3:44:12	CT ABDOMEN W IV CONTRAST	3/6/2005 8:46	40	White	F	127	93	DOD normotensive
17638	2:07:44	CT ABDOMEN W IV CONTRAST	8/17/2005 22:23	49	White	F	140	100	DOD normotensive
17644	0:51:37	CT ABDOMEN W IV CONTRAST	9/15/2005 1:34	32	White	M	149	80	DOD normotensive
19974	0:44:04	CT ABDOMEN PELVIS W IV CONTRAST	8/9/2011 18:13	33	White	M	125	76	DOD normotensive
20454	0:48:45	CT THORAX W IV CONTRAST	5/1/2011 19:10	49	Amer Indian	F	120	73	DOD normotensive
20455	1:07:19	CT THORAX W IV CONTRAST	5/22/2011 5:59	33	White	M	122	98	DOD normotensive
21328	0:39:52	CT THORAX W IV CONTRAST	7/30/2010 21:58	31	White	M	134	77	DOD normotensive
21329	0:46:07	CT THORAX W IV CONTRAST	7/28/2010 10:33	48	White	F	142	68	DOD normotensive
21331	0:36:59	CT THORAX W IV CONTRAST	7/25/2010 22:34	34	White	M	126	81	DOD normotensive
21332	0:34:32	CT THORAX W IV CONTRAST	7/23/2010 20:37	19	White	F	132	96	DOD normotensive
21333	0:41:03	CT THORAX W IV CONTRAST	7/22/2010 10:45	40	White	F	125	83	DOD normotensive
21334	1:59:00	CT THORAX W IV CONTRAST	7/22/2010 22:18	41	White	M	139	60	DOD normotensive
21336	3:11:37	CT THORAX W IV CONTRAST	7/22/2010 5:59	43	White	M	123	86	DOD normotensive
21340	0:24:15	CT THORAX W IV CONTRAST	7/4/2010 23:08	43	White	F	141	91	DOD normotensive
21341	1:20:30	CT THORAX W IV CONTRAST	7/4/2010 18:50	37	White	F	137	80	DOD normotensive
21344	0:35:12	CT THORAX W IV CONTRAST	7/2/2010 17:49	23	White	M	140	75	DOD normotensive
21502	1:32:35	CT THORAX W IV CONTRAST	4/5/2004 8:17	42	White	F	137	84	DOD normotensive
21510	14:27:18	CT ABDOMEN W IV CONTRAST	6/6/2010 22:24	45	White	F	145	80	DOD normotensive
21534	0:46:03	CT THORAX W IV CONTRAST	4/4/2009 20:36	50	Black	F	204	68	DOD normotensive
21536	0:49:00	CT THORAX W IV CONTRAST	8/21/2008 19:59	47	White	M	150	92	DOD normotensive
21774	0:44:53	CT THORAX W IV CONTRAST	8/14/2010 1:39	26	White	M	176	85	DOD normotensive
21842	3:22:26	CT THORAX W IV CONTRAST	4/10/2004 3:22	18	White	F	140	80	DOD normotensive
21885	0:46:56	CT ABDOMEN W IV CONTRAST	6/30/2010 9:27	20	White	F	127	80	DOD normotensive
21887	11:27:22	CT ABDOMEN W IV CONTRAST	6/29/2010 23:26	26	White	M	135	77	DOD normotensive
21896	1:09:42	CT ABDOMEN W IV CONTRAST	9/19/2009 4:13	22	White	M	144	75	DOD normotensive
21903	0:36:04	CT ABDOMEN W IV CONTRAST	10/14/2009 10:58	45	White	F	133	82	DOD normotensive
21905	1:11:56	CT ABDOMEN W IV CONTRAST	10/23/2009 7:09	32	Black	M	162	98	DOD normotensive
21906	0:54:26	CT ABDOMEN W IV CONTRAST	10/25/2009 3:12	30	White	F	129	88	DOD normotensive
21908	0:36:50	CT ABDOMEN W IV CONTRAST	10/27/2009 14:43	41	White	M	133	76	DOD normotensive



**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
21911	0:35:21	CT ABDOMEN W IV CONTRAST	11/9/2009 4:03	33	White	M	138	98	DOD normotensive
21943	0:41:47	CT ABDOMEN PELVIS W IV CONTRAST	9/11/2011 21:15	49	White	F	155	75	DOD normotensive
22712	0:31:03	CT THORAX W IV CONTRAST	7/24/2010 17:29	19	White	M	138	90	DOD normotensive
22735	0:44:04	CT THORAX W IV CONTRAST	8/6/2010 20:32	35	White	F	127	81	DOD normotensive
22756	0:26:50	CT THORAX W IV CONTRAST	8/17/2010 19:57	40	White	M	129	72	DOD normotensive
23081	0:59:34	CT THORAX W IV CONTRAST	9/26/2011 20:49	20	White	F	137	96	DOD normotensive
23085	2:35:21	CT THORAX W IV CONTRAST	7/28/2005 22:25	30	White	M	127	98	DOD normotensive
23566	9:38:06	CT THORAX WO IV CONTRAST	7/14/2009 18:02	21	White	M	171	97	DOD normotensive
23567	0:48:52	CT ABDOMEN W IV CONTRAST	4/10/2010 23:41	19	White	F	121	88	DOD normotensive
23575	0:30:47	CT THORAX W IV CONTRAST	6/22/2009 20:00	42	White	F	142	68	DOD normotensive
23590	0:39:59	CT THORAX W IV CONTRAST	3/3/2010 19:11	34	White	M	131	98	DOD normotensive
23591	0:43:20	CT ABDOMEN W IV CONTRAST	12/20/2009 2:18	22	White	F	122	84	DOD normotensive
23598	1:01:58	CT THORAX W IV CONTRAST	6/26/2010 21:26	22	White	M	152	83	DOD normotensive
23602	0:53:29	CT ABDOMEN PELVIS W IV CONTRAST	4/23/2011 2:21	21	White	M	134	98	DOD normotensive
23603	0:54:17	CT ABDOMEN PELVIS W IV CONTRAST	4/23/2011 22:20	43	White	F	145	93	DOD normotensive
23607	1:24:52	CT ABDOMEN PELVIS W IV CONTRAST	4/12/2011 17:13	28	Black	M	150	63	DOD normotensive
23608	0:36:05	CT ABDOMEN PELVIS W IV CONTRAST	4/9/2011 2:56	37	White	M	132	89	DOD normotensive
23667	1:00:13	CT ABDOMEN PELVIS W IV CONTRAST	9/25/2011 1:51	40	White	M	144	85	DOD normotensive
23668	0:30:57	CT ABDOMEN PELVIS W IV CONTRAST	9/24/2011 15:04	23	White	F	120	61	DOD normotensive
23684	0:31:03	CT THORAX W IV CONTRAST	9/24/2011 18:03	42	White	F	127	83	DOD normotensive
23692	0:53:12	CT THORAX W IV CONTRAST	9/13/2011 1:46	21	White	M	149	84	DOD normotensive
23693	1:14:45	CT THORAX W IV CONTRAST	9/11/2011 21:46	46	White	M	182	84	DOD normotensive
23696	0:58:22	CT THORAX W IV CONTRAST	9/8/2011 17:45	26	White	M	153	58	DOD normotensive
23700	0:32:20	CT THORAX W IV CONTRAST	9/4/2011 23:26	29	White	M	144	68	DOD normotensive
23702	0:41:38	CT THORAX W IV CONTRAST	9/4/2011 21:21	27	White	M	144	56	DOD normotensive
23703	1:21:23	CT THORAX W IV CONTRAST	9/3/2011 20:37	37	White	M	139	84	DOD normotensive
23711	1:01:35	CT THORAX W IV CONTRAST	8/23/2011 15:28	22	White	M	148	91	DOD normotensive
23713	1:00:44	CT THORAX W IV CONTRAST	8/21/2011 12:15	40	White	M	159	94	DOD normotensive
23717	1:31:57	CT THORAX W IV CONTRAST	8/17/2011 11:21	41	White	M	120	58	DOD normotensive
23718	0:41:24	CT THORAX W IV CONTRAST	8/16/2011 8:38	39	White	M	139	72	DOD normotensive
23724	0:51:37	CT THORAX W IV CONTRAST	8/3/2011 11:40	19	Black	M	203	88	DOD normotensive
23729	0:25:03	CT THORAX W IV CONTRAST	7/27/2011 18:09	35	White	M	140	76	DOD normotensive
23736	0:35:17	CT THORAX W IV CONTRAST	7/20/2011 21:20	34	White	M	125	92	DOD normotensive
23738	0:36:39	CT THORAX W IV CONTRAST	7/18/2011 16:40	21	White	F	131	98	DOD normotensive
23739	1:05:29	CT THORAX W IV CONTRAST	7/17/2011 4:10	22	White	M	184	58	DOD normotensive
23781	1:30:01	CT ABDOMEN W IV CONTRAST	9/29/2009 0:19	27	White	M	144	86	DOD normotensive
23787	13:40:47	CT ABDOMEN W IV CONTRAST	11/10/2009 8:53	39	White	M	142	83	DOD normotensive
23788	0:31:38	CT ABDOMEN W IV CONTRAST	9/29/2009 16:20	41	White	M	132	86	DOD normotensive
23801	0:33:03	CT ABDOMEN W IV CONTRAST	6/6/2010 6:18	23	White	M	141	87	DOD normotensive
23840	3:25:59	CT ABDOMEN W IV CONTRAST	8/15/2009 15:02	38	White	F	120	84	DOD normotensive
23861	0:42:55	CT THORAX W IV CONTRAST	6/19/2011 5:36	23	White	M	141	88	DOD normotensive
23865	0:34:34	CT THORAX W IV CONTRAST	7/16/2011 20:51	30	White	M	135	57	DOD normotensive
23868	0:31:46	CT THORAX W IV CONTRAST	7/16/2011 15:04	42	White	M	130	64	DOD normotensive
23876	1:49:22	CT THORAX W IV CONTRAST	5/8/2011 23:47	48	White	M	122	100	DOD normotensive
23880	1:35:32	CT THORAX W IV CONTRAST	7/3/2011 21:51	48	White	F	158	80	DOD normotensive
23881	0:49:38	CT THORAX W IV CONTRAST	7/2/2011 6:21	49	White	M	123	95	DOD normotensive
23882	0:56:05	CT THORAX W IV CONTRAST	7/2/2011 4:48	19	Black	M	166	85	DOD normotensive
23883	0:33:13	CT THORAX W IV CONTRAST	7/2/2011 7:29	47	White	M	141	96	DOD normotensive
23884	0:41:10	CT THORAX W IV CONTRAST	6/30/2011 14:02	30	White	M	141	58	DOD normotensive
23885	0:40:56	CT THORAX W IV CONTRAST	6/28/2011 8:55	22	White	M	146	97	DOD normotensive
23898	6:03:48	CT ABDOMEN PELVIS W IV CONTRAST	6/27/2011 1:28	21	Other	M	129	88	DOD normotensive
23900	0:51:29	CT THORAX W IV CONTRAST	6/19/2011 12:05	20	White	M	152	94	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
23901	0:37:57	CT ABDOMEN PELVIS W IV CONTRAST	6/16/2011 22:17	38	White	M	145	61	DOD normotensive
23920	0:25:09	CT ABDOMEN PELVIS W IV CONTRAST	6/9/2011 10:46	42	White	M	146	73	DOD normotensive
23924	0:33:05	CT ABDOMEN PELVIS W IV CONTRAST	6/7/2011 14:37	18	White	F	141	66	DOD normotensive
23925	0:30:48	CT ABDOMEN PELVIS W IV CONTRAST	6/5/2011 23:27	47	White	M	180	81	DOD normotensive
23928	1:07:52	CT ABDOMEN PELVIS W IV CONTRAST	6/2/2011 23:20	18	White	M	140	87	DOD normotensive
23930	0:28:35	CT ABDOMEN PELVIS W IV CONTRAST	5/26/2011 13:56	22	White	M	160	90	DOD normotensive
23933	0:51:12	CT ABDOMEN PELVIS W IV CONTRAST	5/13/2011 9:56	43	White	M	150	76	DOD normotensive
23934	0:35:26	CT ABDOMEN PELVIS W IV CONTRAST	5/8/2011 20:26	22	White	M	134	78	DOD normotensive
24274	1:08:35	CT ABDOMEN W IV CONTRAST	8/1/2004 20:31	39	White	F	127	98	DOD normotensive
24279	1:05:10	CT ABDOMEN W IV CONTRAST	9/12/2004 1:55	44	White	F	151	89	DOD normotensive
24293	1:07:05	CT THORAX W IV CONTRAST	10/16/2004 9:14	40	Black	M	162	87	DOD normotensive
24294	2:33:59	CT ABDOMEN W IV CONTRAST	9/15/2004 18:32	49	White	M	133	93	DOD normotensive
24298	1:20:37	CT THORAX W IV CONTRAST	8/7/2004 15:17	26	White	M	137	92	DOD normotensive
24300	0:48:53	CT THORAX W IV CONTRAST	8/20/2004 14:42	46	White	M	146	76	DOD normotensive
24302	0:34:43	CT ABDOMEN W IV CONTRAST	9/4/2004 2:13	21	White	M	136	79	DOD normotensive
24306	4:10:43	CT ABDOMEN W IV CONTRAST	9/18/2004 22:40	29	White	M	150	80	DOD normotensive
24310	1:20:34	CT ABDOMEN W IV CONTRAST	8/8/2004 22:50	45	White	M	143	74	DOD normotensive
24311	5:29:47	CT ABDOMEN W IV CONTRAST	8/7/2004 20:44	42	White	M	138	89	DOD normotensive
24314	4:17:37	CT THORAX W IV CONTRAST	9/7/2004 23:02	42	White	M	136	98	DOD normotensive
24315	0:45:43	CT ABDOMEN W IV CONTRAST	10/11/2004 11:07	47		M	122	46	DOD normotensive
24316	1:25:22	CT THORAX W IV CONTRAST	10/9/2004 3:47	24	Black	M	152	89	DOD normotensive
24321	1:07:01	CT ABDOMEN W IV CONTRAST	2/13/2005 7:44	30	Black	M	148	86	DOD normotensive
24325	0:56:47	CT THORAX W IV CONTRAST	3/16/2005 22:50	35	White	M	146	85	DOD normotensive
24327	0:54:28	CT THORAX W IV CONTRAST	4/17/2005 13:51	46	White	M	131	60	DOD normotensive
24329	1:31:24	CT THORAX W IV CONTRAST	2/19/2005 1:19	24	Other	M	178	65	DOD normotensive
24330	1:06:56	CT ABDOMEN W IV CONTRAST	8/14/2004 13:34	19	White	F	126	87	DOD normotensive
24333	6:07:15	CT ABDOMEN W IV CONTRAST	8/14/2004 2:29	21	White	M	159	89	DOD normotensive
24339	0:54:36	CT THORAX W IV CONTRAST	1/11/2005 10:20	37		F	132	88	DOD normotensive
24341	1:26:59	CT THORAX W IV CONTRAST	1/29/2005 22:21	30	Black	M	146	90	DOD normotensive
24342	0:53:19	CT ABDOMEN W IV CONTRAST	3/4/2005 5:20	29	White	M	123	77	DOD normotensive
24343	0:46:07	CT ABDOMEN W IV CONTRAST	4/19/2005 19:20	36	White	M	145	96	DOD normotensive
24346	1:16:01	CT THORAX W IV CONTRAST	11/6/2004 14:44	37	White	M	132	80	DOD normotensive
24366	2:00:17	CT THORAX W IV CONTRAST	4/11/2005 5:27	19	White	M	144	96	DOD normotensive
24370	0:46:11	CT THORAX W IV CONTRAST	10/17/2004 14:04	43	White	F	122	76	DOD normotensive
24372	1:48:20	CT THORAX W IV CONTRAST	1/23/2005 15:20	40	White	M	150	55	DOD normotensive
24378	1:40:25	CT THORAX W IV CONTRAST	2/18/2005 20:42	47	White	M	144	68	DOD normotensive
24381	1:23:49	CT ABDOMEN WO IV CONTRAST	3/25/2005 17:14	43	White	F	123	98	DOD normotensive
24395	2:04:40	CT THORAX W IV CONTRAST	10/22/2004 23:24	33	White	M	130	82	DOD normotensive
24400	1:40:11	CT THORAX W IV CONTRAST	12/24/2004 19:12	32	White	M	149	97	DOD normotensive
24428	1:05:44	CT ABDOMEN W IV CONTRAST	6/3/2005 4:48	42	White	M	145	81	DOD normotensive
24432	2:39:07	CT THORAX W IV CONTRAST	7/26/2005 17:22	27	White	M	182	91	DOD normotensive
24439	1:08:52	CT THORAX W IV CONTRAST	6/19/2005 6:12	20	White	M	140	98	DOD normotensive
24445	1:13:51	CT ABDOMEN W IV CONTRAST	5/10/2005 11:00	19	White	M	136	89	DOD normotensive
24448	3:02:26	CT ABDOMEN W IV CONTRAST	7/23/2005 3:57	28	White	F	128	73	DOD normotensive
24450	3:41:58	CT ABDOMEN W IV CONTRAST	6/26/2005 11:00	20	Black	M	150	73	DOD normotensive
24459	6:31:57	CT ABDOMEN W IV CONTRAST	7/24/2005 15:31	32	White	M	133	87	DOD normotensive
24460	0:40:02	CT THORAX W IV CONTRAST	7/29/2005 0:17	19	White	M	123	84	DOD normotensive
24462	1:07:30	CT ABDOMEN W IV CONTRAST	6/9/2005 22:14	43	White	F	187	82	DOD normotensive
24464	4:14:51	CT THORAX W IV CONTRAST	5/17/2005 0:40	37	White	M	173	83	DOD normotensive
24465	1:47:24	CT ABDOMEN W IV CONTRAST	6/13/2005 19:32	19	White	M	144	84	DOD normotensive
24466	1:55:12	CT ABDOMEN W IV CONTRAST	6/26/2005 21:21	23		M	147	92	DOD normotensive
24472	1:38:47	CT ABDOMEN W IV CONTRAST	7/6/2005 22:43	31	White	M	142	62	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
24473	6:23:33	CT ABDOMEN W IV CONTRAST	7/18/2005 0:01	45	White	M	133	87	DOD normotensive
24476	0:58:45	CT THORAX W IV CONTRAST	7/27/2005 15:27	25	White	M	129	97	DOD normotensive
24483	1:14:56	CT ABDOMEN W IV CONTRAST	7/27/2005 14:11	46	White	F	164	85	DOD normotensive
24484	0:56:45	CT ABDOMEN W IV CONTRAST	7/29/2005 10:20	49	White	F	131	69	DOD normotensive
24485	1:13:06	CT ABDOMEN W IV CONTRAST	4/30/2005 22:53	19	White	F	144	97	DOD normotensive
24488	0:47:40	CT THORAX W IV CONTRAST	5/13/2005 21:04	33	Black	M	154	89	DOD normotensive
24490	1:55:39	CT THORAX W IV CONTRAST	6/10/2005 4:05	20	Black	M	155	86	DOD normotensive
24491	1:20:22	CT THORAX W IV CONTRAST	6/22/2005 9:24	22	White	M	154	83	DOD normotensive
24496	0:43:02	CT THORAX W IV CONTRAST	8/2/2006 8:46	21	Black	M	121	77	DOD normotensive
24519	1:33:20	CT THORAX W IV CONTRAST	11/17/2006 20:58	44	White	M	141	78	DOD normotensive
24522	1:18:34	CT THORAX W IV CONTRAST	10/3/2006 11:59	38	White	F	143	94	DOD normotensive
24534	3:20:41	CT THORAX W IV CONTRAST	4/27/2008 21:26	20	White	M	159	97	DOD normotensive
24538	1:18:11	CT THORAX W IV CONTRAST	8/16/2006 8:42	20	White	M	146	97	DOD normotensive
24540	1:09:09	CT THORAX W IV CONTRAST	9/27/2006 17:44	18	White	M	131	99	DOD normotensive
24543	0:49:49	CT ABDOMEN W IV CONTRAST	10/13/2006 22:39	28	White	M	135	74	DOD normotensive
24545	0:56:50	CT THORAX W IV CONTRAST	10/3/2006 19:26	46	White	M	152	81	DOD normotensive
24546	10:10:46	CT ABDOMEN W IV CONTRAST	9/4/2006 10:46	40	White	M	145	96	DOD normotensive
24547	1:12:56	CT THORAX W IV CONTRAST	10/7/2006 20:53	43	White	M	174	97	DOD normotensive
24548	1:21:43	CT ABDOMEN W IV CONTRAST	9/2/2006 3:46	50	White	M	154	82	DOD normotensive
24562	1:17:16	CT ABDOMEN W IV CONTRAST	10/15/2006 7:29	27	White	M	147	92	DOD normotensive
24564	2:08:25	CT THORAX W IV CONTRAST	8/3/2006 19:30	40	White	M	155	90	DOD normotensive
24569	1:23:22	CT THORAX W IV CONTRAST	11/3/2006 13:27	23		M	146	72	DOD normotensive
24576	0:56:08	CT THORAX W IV CONTRAST	8/3/2006 18:04	21	White	M	140	82	DOD normotensive
24579	1:23:58	CT THORAX W IV CONTRAST	8/13/2006 16:59	21	Black	M	169	61	DOD normotensive
24602	1:06:31	CT THORAX W IV CONTRAST	9/9/2006 19:58	41	White	M	175	82	DOD normotensive
24608	0:57:32	CT ABDOMEN W IV CONTRAST	10/5/2006 21:36	22	White	M	133	78	DOD normotensive
24616	1:44:40	CT THORAX W IV CONTRAST	11/7/2006 10:24	43	White	M	183	99	DOD normotensive
24620	1:00:39	CT ABDOMEN W IV CONTRAST	1/6/2007 0:27	21	White	M	120	96	DOD normotensive
24622	1:04:39	CT THORAX W IV CONTRAST	3/22/2007 22:49	49	White	M	135	88	DOD normotensive
24632	2:33:23	CT THORAX W IV CONTRAST	9/8/2006 15:16	29	Black	M	141	90	DOD normotensive
24633	1:26:17	CT THORAX W IV CONTRAST	8/21/2006 23:48	47	White	M	151	99	DOD normotensive
24635	1:05:34	CT THORAX W IV CONTRAST	8/29/2006 19:13	22	White	M	154	76	DOD normotensive
24655	1:10:23	CT THORAX W IV CONTRAST	12/17/2006 4:03	43	White	M	138	84	DOD normotensive
24657	0:59:03	CT THORAX W IV CONTRAST	10/6/2007 12:52	46	Black	F	135	100	DOD normotensive
24861	0:47:47	CT ABDOMEN PELVIS W IV CONTRAST	1/22/2012 4:15	23	White	M	149	85	DOD normotensive
29408	0:31:46	CT ABDOMEN PELVIS W IV CONTRAST	4/4/2012 9:41	46	White	F	121	61	DOD normotensive
35582	0:38:06	CT THORAX W IV CONTRAST	10/22/2011 17:45	32	White	F	138	66	DOD normotensive
35636	1:33:07	CT ABDOMEN W IV CONTRAST	10/8/2006 6:35	32	White	F	132	98	DOD normotensive
35639	0:57:36	CT THORAX W IV CONTRAST	6/10/2006 0:57	24	White	M	134	92	DOD normotensive
35648	2:35:41	CT ABDOMEN W IV CONTRAST	5/17/2005 23:25	48	White	M	122	86	DOD normotensive
35652	0:54:36	CT THORAX W IV CONTRAST	2/28/2004 18:55	41	White	M	138	83	DOD normotensive
40205	1:41:27	CHEST ABDOMEN PELVIS	10/2/2006 9:44	33	White	M	123	94	DOD normotensive
41191	0:29:27	CT ABDOMEN PELVIS W IV CONTRAST	5/21/2012 18:05	18	White	F	144	85	DOD normotensive
41592	0:42:24	CT ABDOMEN PELVIS W IV CONTRAST	4/5/2012 13:18	44	White	M	152	67	DOD normotensive
42190	5:08:44	CT ABDOMEN PELVIS W IV CONTRAST	12/5/2011 3:07	37	White	M	135	98	DOD normotensive
48034	0:39:07	CT ABDOMEN PELVIS W IV CONTRAST	7/9/2012 2:17	43	White	M	128	87	DOD normotensive
48078	3:39:28	CT ABDOMEN PELVIS W IV CONTRAST	10/13/2011 12:26	46	White	M	122	92	DOD normotensive
48812	0:40:31	CT THORAX W IV CONTRAST	1/6/2012 22:15	30	White	M	147	85	DOD normotensive
49395	0:11:37	CT THORAX W IV CONTRAST	10/15/2010 16:33	31	White	M	125	91	DOD normotensive
49424	0:51:34	CT THORAX W IV CONTRAST	9/7/2010 18:50	48	White	M	170	93	DOD normotensive
49462	0:58:37	CT THORAX W IV CONTRAST	8/26/2010 23:21	36	White	M	159	96	DOD normotensive
49464	2:24:51	CT THORAX W IV CONTRAST	8/27/2010 0:29	35	White	M	140	82	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
49473	2:46:20	CT THORAX W IV CONTRAST	8/9/2005 2:24	21	White	F	145	98	DOD normotensive
49482	7:12:58	CT ABDOMEN W IV CONTRAST	8/2/2005 13:45	30	White	F	159	55	DOD normotensive
49488	0:58:13	CT THORAX W IV CONTRAST	8/13/2005 6:47	22	White	M	133	90	DOD normotensive
49494	1:14:38	CT THORAX W IV CONTRAST	8/16/2005 18:24	49	White	F	135	90	DOD normotensive
49496	1:14:55	CT THORAX W IV CONTRAST	9/10/2005 12:23	43	Asian	F	133	89	DOD normotensive
49504	1:20:49	CT ABDOMEN W IV CONTRAST	8/11/2005 14:49	48	White	M	135	70	DOD normotensive
49508	1:04:06	CT ABDOMEN W IV CONTRAST	8/6/2005 12:10	18	White	M	150	60	DOD normotensive
49510	2:30:47	CT ABDOMEN W IV CONTRAST	9/1/2005 21:02	49	White	M	184	78	DOD normotensive
49564	11:25:06	CT ABDOMEN W IV CONTRAST	11/8/2008 19:47	21	White	M	120	84	DOD normotensive
49621	0:38:26	CT THORAX W IV CONTRAST	9/8/2011 8:43	30	White	M	123	72	DOD normotensive
49636	2:15:29	CT THORAX W IV CONTRAST	10/22/2005 20:22	33	White	M	153	98	DOD normotensive
49648	0:40:42	CT THORAX W IV CONTRAST	4/10/2011 4:45	20	Black	M	152	94	DOD normotensive
49656	0:46:20	CT THORAX W IV CONTRAST	2/3/2011 21:57	41	Hispanic	M	139	97	DOD normotensive
49658	0:46:36	CT ABDOMEN W IV CONTRAST	10/30/2010 3:12	30	Black	M	145	87	DOD normotensive
49848	5:16:23	CT ABDOMEN PELVIS W IV CONTRAST	6/21/2011 7:05	23	Other	F	149	87	DOD normotensive
50376	1:02:56	CT ABDOMEN W IV CONTRAST	10/1/2005 10:03	34	White	F	128	83	DOD normotensive
50378	2:51:46	CT ABDOMEN W IV CONTRAST	9/29/2005 2:30	38	White	M	158	85	DOD normotensive
50382	1:21:05	CT THORAX W IV CONTRAST	7/31/2005 4:36	49	White	M	136	97	DOD normotensive
50397	1:49:37	CT THORAX W IV CONTRAST	9/25/2005 19:10	33	White	M	206	81	DOD normotensive
50406	3:22:20	CT THORAX W IV CONTRAST	7/25/2005 22:50	30	White	M	142	78	DOD normotensive
50409	11:25:06	CT ABDOMEN W IV CONTRAST	11/8/2008 19:47	21	White	M	120	84	DOD normotensive
50417	1:18:43	CT THORAX W IV CONTRAST	2/18/2006 13:51	38	White	M	127	87	DOD normotensive
50419	4:49:48	CT ABDOMEN W IV CONTRAST	7/9/2005 15:02	29	White	F	155	65	DOD normotensive
50422	0:56:30	CT THORAX W IV CONTRAST	2/1/2009 16:39	26	White	F	124	100	DOD normotensive
50504	0:41:36	CT ABDOMEN PELVIS W IV CONTRAST	7/18/2012 6:26	36	White	M	144	60	DOD normotensive
50790	1:25:56	CT THORAX W IV CONTRAST	7/9/2005 22:40	39	White	F	127	86	DOD normotensive
50809	1:35:56	CT THORAX W IV CONTRAST	5/27/2006 13:35	24	White	M	121	100	DOD normotensive
50811	1:15:09	CT ABDOMEN W IV CONTRAST	12/17/2005 5:39	28	White	M	136	97	DOD normotensive
50814	12:06:14	CT ABDOMEN W IV CONTRAST	10/8/2007 12:01	47	White	M	128	80	DOD normotensive
50815	1:02:56	CT ABDOMEN W IV CONTRAST	10/1/2005 10:03	34	White	F	128	83	DOD normotensive
50816	1:34:11	CT ABDOMEN W IV CONTRAST	8/25/2005 11:39	48	White	M	136	66	DOD normotensive
50817	1:35:49	CT ABDOMEN W IV CONTRAST	5/3/2005 10:27	25	Hispanic	M	133	96	DOD normotensive
50826	1:16:42	CT ABDOMEN W IV CONTRAST	6/20/2005 3:13	26	White	M	132	73	DOD normotensive
50827	1:16:29	CT ABDOMEN W IV CONTRAST	6/30/2005 2:35	29	White	M	137	80	DOD normotensive
50834	0:55:47	CT THORAX W IV CONTRAST	6/21/2007 22:15	44	White	F	140	69	DOD normotensive
50909	0:49:34	CT THORAX WO IV CONTRAST	11/7/2010 1:12	49	Other	M	129	87	DOD normotensive
50921	1:46:35	CT THORAX W IV CONTRAST	11/30/2010 19:43	19	Hispanic	F	127	96	DOD normotensive
50923	1:46:35	CT THORAX W IV CONTRAST	11/30/2010 19:43	19	Hispanic	F	127	96	DOD normotensive
51583	0:55:44	CT ABDOMEN PELVIS W IV CONTRAST	7/27/2012 4:27	41	White	F	127	71	DOD normotensive
51588	1:10:14	CT ABDOMEN W IV CONTRAST	12/23/2005 20:21	30	White	M	150	82	DOD normotensive
51701	0:41:02	CT THORAX W IV CONTRAST	6/15/2008 15:47	29	White	F	122	90	DOD normotensive
51743	1:08:24	CT ABDOMEN W IV CONTRAST	11/11/2005 16:08	33	Hispanic	M	134	66	DOD normotensive
51768	0:58:34	CT ABDOMEN PELVIS W IV CONTRAST	6/4/2011 4:31	26	White	M	155	84	DOD normotensive
51793	0:43:09	CT ABDOMEN W IV CONTRAST	2/8/2003 22:52	18	Black	M	140	96	DOD normotensive
52495	-01:50:56	CT OUTSIDE FILM CONSULT ABDOMEN	6/28/2012 17:01	49	White	M	143	88	DOD normotensive
52510	-04:14:05	CT OUTSIDE FILM CONSULT ABDOMEN AND PELVIS	6/18/2012 21:15	36	White	M	121	80	DOD normotensive
52660	2:04:47	CT ABDOMEN PELVIS W IV CONTRAST	1/14/2013 8:35	41	White	M	137	80	DOD normotensive
52666	0:37:55	CT THORAX W IV CONTRAST	10/15/2012 8:40	20	Black	M	126	85	DOD normotensive
52667	0:26:44	CT THORAX W IV CONTRAST	11/3/2012 9:15	19	White	M	155	85	DOD normotensive
52684	6:26:44	CT THORAX W IV CONTRAST	7/23/2012 21:57	39	Black	F	143	92	DOD normotensive
52686	1:48:33	CT THORAX W IV CONTRAST	5/15/2012 23:38	29	White	M	154	65	DOD normotensive
52936	0:38:25	CT ABDOMEN PELVIS W IV CONTRAST	11/23/2011 9:52	47	White	M	140	85	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
52937	1:11:42	CT THORAX W IV CONTRAST	10/23/2011 15:29	48	White	M	177	91	DOD normotensive
52945	1:15:03	CT THORAX W IV CONTRAST	12/2/2011 20:34	50	White	F	195	76	DOD normotensive
52949	0:28:57	CT THORAX W IV CONTRAST	3/5/2012 15:51	49	White	M	165	100	DOD normotensive
52952	1:03:36	CT THORAX W IV CONTRAST	12/17/2011 2:40	33	White	M	141	90	DOD normotensive
52957	-16:58:58	CT OUTSIDE FILM CONSULT CHEST	12/21/2011 4:23	22	White	M	157	94	DOD normotensive
52963	0:37:30	CT ABDOMEN PELVIS W IV CONTRAST	2/22/2012 7:30	48	White	F	140	78	DOD normotensive
53737	1:09:55	CT ABDOMEN WO IV CONTRAST	3/8/2006 19:17	42	White	M	209	88	DOD normotensive
53742	3:49:03	CT ABDOMEN W IV CONTRAST	2/6/2006 21:29	48	Black	M	162	90	DOD normotensive
53743	0:58:55	CT THORAX W IV CONTRAST	2/21/2006 20:18	23	White	M	131	96	DOD normotensive
53748	2:01:12	CT ABDOMEN W IV CONTRAST	2/11/2006 20:41	41	White	M	152	68	DOD normotensive
53834	3:38:20	CT THORAX W IV CONTRAST	10/11/2011 6:16	34	Black	M	152	75	DOD normotensive
53837	1:11:42	CT THORAX W IV CONTRAST	10/23/2011 15:29	48	White	M	177	91	DOD normotensive
53845	0:43:09	CT THORAX W IV CONTRAST	10/18/2011 10:09	29	White	M	127	65	DOD normotensive
53846	2:37:32	CT THORAX W IV CONTRAST	10/22/2011 18:27	31	White	M	128	71	DOD normotensive
53847	0:46:25	CT ABDOMEN PELVIS W IV CONTRAST	10/2/2011 2:52	22	White	M	159	64	DOD normotensive
53849	8:38:45	CT THORAX W IV CONTRAST	10/6/2011 17:56	31	White	F	125	78	DOD normotensive
53851	0:43:55	CT THORAX W IV CONTRAST	10/8/2011 12:08	26	Black	M	145	68	DOD normotensive
53854	1:22:39	CT THORAX W IV CONTRAST	10/2/2011 5:01	27	White	M	135	99	DOD normotensive
53858	0:53:40	CT ABDOMEN PELVIS W IV CONTRAST	10/23/2011 14:43	37	White	M	130	96	DOD normotensive
53875	-18:27:27	CT OUTSIDE FILM CONSULT CHEST	10/23/2011 2:21	21	White	M	167	76	DOD normotensive
53879	0:38:55	CT THORAX W IV CONTRAST	10/24/2011 23:07	28	Hispanic	F	155	94	DOD normotensive
53898	4:38:48	CT ABDOMEN PELVIS W IV CONTRAST	11/10/2011 23:08	20	White	F	127	78	DOD normotensive
53910	0:43:52	CT ABDOMEN PELVIS W IV CONTRAST	12/13/2011 7:35	33	White	M	139	96	DOD normotensive
53914	0:39:50	CT ABDOMEN PELVIS W IV CONTRAST	12/10/2011 10:06	45	White	F	143	77	DOD normotensive
53939	0:38:22	CT THORAX W IV CONTRAST	12/18/2011 6:43	41	White	M	193	78	DOD normotensive
53956	0:53:50	CT ABDOMEN PELVIS W IV CONTRAST	1/13/2012 16:51	34	White	M	158	75	DOD normotensive
53957	0:45:32	CT ABDOMEN PELVIS W IV CONTRAST	1/13/2012 2:36	20	White	M	137	98	DOD normotensive
53966	0:45:29	CT ABDOMEN PELVIS W IV CONTRAST	2/4/2012 5:45	25	Black	F	129	94	DOD normotensive
53969	1:02:34	CT ABDOMEN PELVIS W IV CONTRAST	1/28/2012 12:40	19	White	M	139	66	DOD normotensive
53974	0:46:12	CT THORAX W IV CONTRAST	2/10/2012 22:20	46	White	M	171	100	DOD normotensive
53979	0:28:00	CT THORAX W IV CONTRAST	3/5/2012 18:16	35	White	F	185	88	DOD normotensive
53990	4:50:25	CT ABDOMEN PELVIS W IV CONTRAST	3/3/2012 0:58	29	White	M	137	77	DOD normotensive
54023	0:38:26	CT ABDOMEN PELVIS W IV CONTRAST	3/30/2012 16:23	48	White	M	199	98	DOD normotensive
54025	1:37:57	CT THORAX W IV CONTRAST	4/18/2012 19:18	25	White	M	142	85	DOD normotensive
54028	0:45:11	CT THORAX W IV CONTRAST	4/17/2012 20:55	24	White	F	151	88	DOD normotensive
54049	0:48:11	CT THORAX W IV CONTRAST	5/6/2012 20:40	28	White	M	152	65	DOD normotensive
54055	1:08:08	CT ABDOMEN PELVIS W IV CONTRAST	7/15/2012 5:24	27	White	F	148	93	DOD normotensive
54066	1:53:16	CT ABDOMEN PELVIS W IV CONTRAST	7/25/2012 2:05	48	White	M	124	84	DOD normotensive
54073	1:16:33	CT THORAX W IV CONTRAST	6/30/2012 1:12	29	White	F	143	80	DOD normotensive
54080	12:30:17	CT ABDOMEN PELVIS W IV CONTRAST	8/1/2012 8:03	23	White	F	134	76	DOD normotensive
54106	0:30:13	CT THORAX W IV CONTRAST	8/22/2012 0:46	44	White	M	147	80	DOD normotensive
54111	-03:25:04	CT OUTSIDE FILM CONSULT CHEST	8/20/2012 23:38	23	Black	M	137	88	DOD normotensive
54165	0:33:07	CT THORAX W IV CONTRAST	5/26/2012 19:25	43	White	M	127	86	DOD normotensive
54166	0:53:53	CT ABDOMEN PELVIS W IV CONTRAST	5/24/2012 21:08	50	White	F	122	90	DOD normotensive
54170	0:35:23	CT THORAX W IV CONTRAST	5/12/2012 17:45	19	White	M	141	86	DOD normotensive
54174	0:42:36	CT ABDOMEN PELVIS W IV CONTRAST	5/23/2012 14:45	33	White	M	133	72	DOD normotensive
54177	-04:09:58	CT OUTSIDE FILM CONSULT ABDOMEN	6/13/2012 0:00	24	Black	M	151	100	DOD normotensive
54186	1:14:34	CT ABDOMEN PELVIS W IV CONTRAST	4/29/2012 21:52	22	White	F	159	86	DOD normotensive
54189	0:24:39	CT ABDOMEN W IV CONTRAST	8/21/2012 14:45	27	White	F	126	86	DOD normotensive
54216	-04:13:11	CT OUTSIDE FILM CONSULT ABDOMEN AND PELVIS	6/4/2012 21:56	41	White	M	133	68	DOD normotensive
54217	0:39:56	CT ABDOMEN PELVIS W IV CONTRAST	5/28/2012 8:56	35	White	F	140	86	DOD normotensive
54218	0:45:16	CT ABDOMEN PELVIS W IV CONTRAST	6/1/2012 17:02	32	Other	M	163	74	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
54308	0:41:26	CT THORAX W IV CONTRAST	9/4/2012 1:32	45	White	M	133	98	DOD normotensive
54311	-03:26:20	CT OUTSIDE FILM CONSULT ABDOMEN AND PELVIS	9/4/2012 0:00	30	White	M	141	68	DOD normotensive
54312	1:23:31	CT THORAX W IV CONTRAST	9/5/2012 19:58	31	White	M	121	82	DOD normotensive
54320	3:06:50	CT THORAX W IV CONTRAST	6/30/2012 22:09	44	White	M	156	95	DOD normotensive
54322	1:27:45	CT THORAX W IV CONTRAST	6/22/2012 20:53	26	White	M	121	85	DOD normotensive
54323	1:51:03	CT ABDOMEN PELVIS W IV CONTRAST	6/16/2012 5:34	25	White	M	154	87	DOD normotensive
54328	0:46:37	CT THORAX W IV CONTRAST	6/30/2012 0:17	21	White	M	128	77	DOD normotensive
54331	19:32:57	CT ABDOMEN PELVIS WO IV CONTRAST	6/24/2012 15:31	36	White	M	147	59	DOD normotensive
54356	0:50:03	CT ABDOMEN PELVIS W IV CONTRAST	9/12/2012 3:35	43	White	F	123	88	DOD normotensive
54365	5:14:35	CT ABDOMEN PELVIS W IV CONTRAST	9/10/2012 19:35	33	White	F	140	75	DOD normotensive
54376	0:46:33	CT THORAX W IV CONTRAST	9/25/2012 23:27	25	White	M	137	93	DOD normotensive
54378	1:39:59	CT ABDOMEN PELVIS W IV CONTRAST	9/22/2012 4:30	28	Black	M	148	99	DOD normotensive
54380	0:35:08	CT THORAX W IV CONTRAST	10/1/2012 19:37	49	White	M	153	97	DOD normotensive
54381	1:11:39	CT THORAX W IV CONTRAST	9/30/2012 20:31	23	White	M	141	62	DOD normotensive
54393	0:34:02	CT THORAX W IV CONTRAST	10/28/2012 19:53	36	White	M	178	56	DOD normotensive
54398	1:44:31	CT ABDOMEN PELVIS W IV CONTRAST	10/14/2012 18:12	37	White	M	157	66	DOD normotensive
54418	1:01:15	CT THORAX W IV CONTRAST	10/22/2012 23:37	32	Black	M	122	83	DOD normotensive
54420	3:45:02	CT THORAX W IV CONTRAST	10/18/2012 19:14	42	White	F	142	87	DOD normotensive
54426	0:58:13	CT ABDOMEN PELVIS W IV CONTRAST	10/20/2012 21:26	26	Other	F	125	82	DOD normotensive
54429	0:40:50	CT ABDOMEN PELVIS W IV CONTRAST	11/4/2012 3:21	28	White	M	133	90	DOD normotensive
54431	0:53:38	CT THORAX W IV CONTRAST	11/10/2012 14:23	49	Asian	M	141	73	DOD normotensive
54435	1:26:32	CT ABDOMEN PELVIS W IV CONTRAST	12/22/2012 16:27	50	Black	M	121	94	DOD normotensive
54437	-02:59:58	CT OUTSIDE FILM CONSULT CHEST	12/23/2012 20:34	43	White	M	133	64	DOD normotensive
54438	0:53:39	CT ABDOMEN PELVIS W IV CONTRAST	11/27/2012 14:26	19	White	F	147	64	DOD normotensive
54444	-03:04:55	CT OUTSIDE FILM CONSULT ABDOMEN AND PELVIS	12/21/2012 6:23	47	White	M	157	77	DOD normotensive
54514	1:37:52	CT ABDOMEN PELVIS W IV CONTRAST	11/24/2012 0:28	24	Unk	M	135	80	DOD normotensive
54519	0:43:46	CT THORAX W IV CONTRAST	11/24/2012 4:39	26	Black	M	153	100	DOD normotensive
54540	0:39:51	CT ABDOMEN PELVIS W IV CONTRAST	12/18/2012 23:34	25	White	F	160	98	DOD normotensive
55254	0:45:39	CT POST PROCESSED T SPINE	2/20/2013 18:34	32	Black	F	125	82	DOD normotensive
55946	1:14:58	CT ABDOMEN W IV CONTRAST	3/21/2005 13:51	38	White	M	134	75	DOD normotensive
55985	0:59:30	CT THORAX W IV CONTRAST	6/1/2009 19:34	23	White	F	129	91	DOD normotensive
56354	0:49:57	CT THORAX W IV CONTRAST	9/2/2003 20:57	25	White	M	150	79	DOD normotensive
56365	0:53:37	CT ABDOMEN W IV CONTRAST	12/20/2003 2:07	22	Asian	F	131	71	DOD normotensive
57226	2:02:28	CT ABDOMEN W IV CONTRAST	7/8/2004 4:46	18	Black	M	145	97	DOD normotensive
57875	1:13:07	CT ABDOMEN PELVIS W IV CONTRAST	7/12/2011 3:15	22	White	M	137	74	DOD normotensive
57878	1:45:30	CT THORAX W IV CONTRAST	7/12/2005 20:56	27	White	M	136	68	DOD normotensive
57879	1:27:59	CT ABDOMEN W IV CONTRAST	9/2/2005 13:42	49	White	F	163	77	DOD normotensive
57891	3:23:25	CT ABDOMEN W IV CONTRAST	9/11/2005 0:02	29	White	M	143	95	DOD normotensive
57894	1:47:26	CT ABDOMEN PELVIS W IV CONTRAST	7/2/2011 21:00	47	White	M	131	59	DOD normotensive
57898	0:58:47	CT THORAX W IV CONTRAST	6/26/2005 18:52	37	White	M	133	90	DOD normotensive
57899	4:18:56	CT ABDOMEN W IV CONTRAST	8/28/2005 6:33	50	Black	M	149	86	DOD normotensive
57903	0:47:33	CT ABDOMEN PELVIS W IV CONTRAST	8/15/2011 13:21	19	White	M	134	93	DOD normotensive
57905	1:53:08	CT ABDOMEN W IV CONTRAST	5/31/2005 18:49	19	White	F	131	81	DOD normotensive
57906	1:20:40	CT ABDOMEN W IV CONTRAST	9/4/2005 18:03	29	Black	M	147	78	DOD normotensive
57909	1:15:47	CT ABDOMEN W IV CONTRAST	8/30/2005 21:15	24	White	M	141	92	DOD normotensive
57917	1:16:25	CT ABDOMEN PELVIS W IV CONTRAST	4/10/2011 3:00	20	White	M	124	64	DOD normotensive
57950	5:03:15	CT ABDOMEN W IV CONTRAST	7/11/2010 23:32	44	White	M	155	70	DOD normotensive
57951	1:54:43	CT ABDOMEN W IV CONTRAST	9/25/2005 16:03	30	White	F	134	84	DOD normotensive
57954	0:49:43	CT ABDOMEN PELVIS W IV CONTRAST	1/23/2011 16:19	42	White	M	145	85	DOD normotensive
57955	8:09:49	CT ABDOMEN W IV CONTRAST	8/21/2010 23:29	42	White	M	128	76	DOD normotensive
57981	1:34:30	CT ABDOMEN W IV CONTRAST	1/1/2005 17:04	33	White	F	147	94	DOD normotensive
57985	3:07:21	CT THORAX W IV CONTRAST	12/26/2004 14:30	42	Black	F	149	74	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
57986	1:20:53	CT ABDOMEN W IV CONTRAST	6/5/2004 13:49	27	White	M	131	97	DOD normotensive
57987	0:48:16	CT ABDOMEN W IV CONTRAST	5/21/2004 0:46	45	White	M	125	90	DOD normotensive
57992	4:41:57	CT ABDOMEN W IV CONTRAST	1/27/2005 4:43	21	White	M	146	74	DOD normotensive
57995	1:39:37	CT ABDOMEN W IV CONTRAST	7/25/2004 21:20	21	White	M	141	92	DOD normotensive
57996	1:35:55	CT THORAX W IV CONTRAST	3/24/2005 22:54	48	White	M	139	96	DOD normotensive
58006	0:55:13	CT ABDOMEN W IV CONTRAST	9/4/2003 21:44	25	White	M	132	99	DOD normotensive
58007	0:58:31	CT ABDOMEN W IV CONTRAST	2/19/2004 18:17	20	White	M	122	93	DOD normotensive
58011	1:05:42	CT ABDOMEN W IV CONTRAST	11/21/2003 23:25	49	White	M	137	69	DOD normotensive
58015	2:07:43	CT ABDOMEN W IV CONTRAST	9/25/2003 21:52	20	White	F	137	84	DOD normotensive
58024	1:14:44	CT ABDOMEN W IV CONTRAST	11/18/2003 18:22	45	White	M	158	75	DOD normotensive
58027	1:03:33	CT ABDOMEN WO IV CONTRAST	4/5/2004 21:42	24	White	M	155	96	DOD normotensive
58030	1:19:15	CT ABDOMEN W IV CONTRAST	1/11/2004 3:39	19	White	M	136	97	DOD normotensive
58032	0:54:04	CT THORAX W IV CONTRAST	2/26/2004 16:31	45		M	158	85	DOD normotensive
58034	6:12:11	CT ABDOMEN W IV CONTRAST	10/3/2005 0:12	19	White	M	140	61	DOD normotensive
58036	1:14:41	CT THORAX W IV CONTRAST	9/29/2005 15:45	49	White	F	122	95	DOD normotensive
58042	1:04:34	CT ABDOMEN W IV CONTRAST	10/17/2005 15:31	46	White	F	159	86	DOD normotensive
58043	1:46:04	CT ABDOMEN W IV CONTRAST	10/24/2005 12:22	20	White	M	138	90	DOD normotensive
58045	8:21:59	CT ABDOMEN W IV CONTRAST	10/22/2005 21:37	46	Black	F	169	100	DOD normotensive
58055	1:32:27	CT ABDOMEN W IV CONTRAST	7/7/2003 17:47	28	White	F	137	79	DOD normotensive
58057	0:59:46	CT ABDOMEN W IV CONTRAST	5/27/2003 19:40	46	White	M	157	68	DOD normotensive
58075	0:54:22	CT ABDOMEN PELVIS W IV CONTRAST	3/20/2011 20:34	43	Hispanic	M	123	96	DOD normotensive
58101	0:59:33	CT ABDOMEN W IV CONTRAST	4/8/2007 14:52	18	White	F	138	70	DOD normotensive
58104	-06:34:35	CT OUTSIDE FILM CONSULT CHEST	12/29/2006 0:32	32	Black	F	124	79	DOD normotensive
58111	9:34:16	CT THORAX W IV CONTRAST	11/5/2005 18:12	40	White	M	145	64	DOD normotensive
58135	-02:26:31	CT OUTSIDE FILM CONSULT ABDOMEN	3/30/2008 14:03	36	White	M	136	67	DOD normotensive
58288	1:11:43	CT THORAX W IV CONTRAST	6/14/2008 12:23	38	White	F	120	94	DOD normotensive
58294	0:38:01	CT THORAX W IV CONTRAST	10/5/2007 8:08	43	White	M	151	77	DOD normotensive
59296	0:53:52	CT ABDOMEN PELVIS W IV CONTRAST	4/7/2013 3:42	42	White	M	140	95	DOD normotensive
59297	0:58:13	CT ABDOMEN PELVIS W IV CONTRAST	4/7/2013 3:06	28	White	M	128	97	DOD normotensive
59298	0:25:32	CT ABDOMEN PELVIS WO IV CONTRAST	4/7/2013 21:06	42	White	F	122	96	DOD normotensive
59318	0:48:09	CT ABDOMEN PELVIS W IV CONTRAST	4/12/2013 22:29	44	White	M	160	89	DOD normotensive
59325	0:37:33	CT ABDOMEN PELVIS W IV CONTRAST	11/15/2012 20:25	26	White	M	166	84	DOD normotensive
59330	0:36:16	CT ABDOMEN PELVIS W IV CONTRAST	12/2/2012 2:10	34	White	M	134	79	DOD normotensive
59331	0:56:24	CT ABDOMEN PELVIS W IV CONTRAST	11/16/2012 14:29	33	White	F	132	84	DOD normotensive
59340	0:56:24	CT ABDOMEN PELVIS W IV CONTRAST	1/17/2013 9:48	39	White	M	203	82	DOD normotensive
59343	0:41:54	CT ABDOMEN PELVIS W IV CONTRAST	1/22/2013 7:14	24	White	M	132	88	DOD normotensive
59356	4:59:33	CT ABDOMEN PELVIS W IV CONTRAST	1/29/2013 17:40	34	Asian	M	129	86	DOD normotensive
59363	-02:05:45	CT OUTSIDE FILM CONSULT ABDOMEN AND PELVIS	2/10/2013 17:50	23	White	F	126	69	DOD normotensive
59370	-04:31:53	CT OUTSIDE FILM CONSULT ABDOMEN AND PELVIS	2/17/2013 18:01	37	White	F	162	98	DOD normotensive
59371	0:38:09	CT ABDOMEN PELVIS W IV CONTRAST	2/23/2013 22:15	18	White	M	154	82	DOD normotensive
59375	0:42:27	CT ABDOMEN PELVIS W IV CONTRAST	2/23/2013 1:22	45	White	M	153	82	DOD normotensive
59377	1:40:23	CT ABDOMEN PELVIS W IV CONTRAST	2/16/2013 18:07	33	White	M	147	100	DOD normotensive
59386	1:04:50	CT ABDOMEN PELVIS W IV CONTRAST	3/6/2013 6:30	27	White	M	168	68	DOD normotensive
59387	0:35:37	CT ABDOMEN PELVIS W IV CONTRAST	3/18/2013 19:05	41	White	M	191	95	DOD normotensive
59390	0:57:00	CT ABDOMEN PELVIS W IV CONTRAST	2/18/2013 11:28	40	White	M	125	62	DOD normotensive
59396	-04:08:18	CT OUTSIDE FILM CONSULT CHEST	1/1/2013 1:40	43	White	M	127	67	DOD normotensive
59484	0:30:08	CT ABDOMEN PELVIS W IV CONTRAST	3/26/2013 20:37	31	White	M	122	99	DOD normotensive
59488	0:33:09	CT ABDOMEN PELVIS W IV CONTRAST	3/30/2013 0:39	19	White	M	125	83	DOD normotensive
59489	0:38:52	CT ABDOMEN PELVIS W IV CONTRAST	3/23/2013 12:34	24	White	F	141	87	DOD normotensive
59743	3:03:56	CT ABDOMEN W IV CONTRAST	12/13/2002 19:11	18	Hispanic	M	123	67	DOD normotensive
60663	0:28:28	CT ABDOMEN W IV CONTRAST	8/25/2010 18:44	34	Black	M	158	100	DOD normotensive
60682	0:38:35	CT ABDOMEN W IV CONTRAST	9/22/2010 7:15	45	Black	M	142	92	DOD normotensive

**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
60688	2:39:49	CT ABDOMEN W IV CONTRAST	9/18/2010 14:57	24	White	F	129	98	DOD normotensive
60914	1:07:42	CT ABDOMEN W IV CONTRAST	1/14/2004 14:25	19	White	M	147	78	DOD normotensive
60915	0:59:52	CT ABDOMEN W IV CONTRAST	9/10/2003 5:14	19	Black	M	149	99	DOD normotensive
60917	2:24:05	CT ABDOMEN W IV CONTRAST	10/12/2003 11:37	20	White	M	159	89	DOD normotensive
60924	1:50:44	CT THORAX W IV CONTRAST	1/26/2004 10:37	19	Hispanic	M	144	85	DOD normotensive
60927	2:33:31	CT THORAX W IV CONTRAST	2/5/2005 20:18	19	White	M	158	61	DOD normotensive
60928	1:04:09	CT ABDOMEN W IV CONTRAST	1/20/2003 11:58	20	White	M	143	75	DOD normotensive
60929	1:05:59	CT ABDOMEN W IV CONTRAST	2/11/2003 11:35	19	White	M	178	63	DOD normotensive
60931	0:55:12	CT ABDOMEN W IV CONTRAST	7/4/2003 21:33	19	Black	M	144	72	DOD normotensive
60935	1:11:37	CT THORAX W IV CONTRAST	3/21/2004 5:06	19	White	M	140	100	DOD normotensive
60936	0:54:41	CT ABDOMEN W IV CONTRAST	10/26/2003 3:21	18	White	M	145	95	DOD normotensive
60938	0:43:57	CT ABDOMEN W IV CONTRAST	4/29/2004 5:04	18	White	M	140	83	DOD normotensive
60939	1:28:05	CT ABDOMEN W IV CONTRAST	8/4/2005 23:14	20	Hispanic	F	141	96	DOD normotensive
60940	3:33:01	CT ABDOMEN WO IV CONTRAST	5/11/2004 17:37	19	White	M	125	54	DOD normotensive
60944	1:06:58	CT ABDOMEN W IV CONTRAST	3/15/2005 21:28	20	White	M	145	84	DOD normotensive
60946	1:27:27	CT ABDOMEN W IV CONTRAST	7/10/2005 21:47	19	White	M	144	57	DOD normotensive
60947	1:33:28	CT THORAX W IV CONTRAST	7/22/2005 18:55	20	White	M	150	94	DOD normotensive
60948	3:09:59	CT ABDOMEN W IV CONTRAST	9/11/2005 2:09	20	White	M	125	81	DOD normotensive
60950	2:13:16	CT THORAX W IV CONTRAST	11/3/2005 8:03	20	White	M	158	77	DOD normotensive
61097	-01:43:10	CT OUTSIDE FILM CONSULT ABDOMEN AND PELVIS	2/19/2011 4:03	19	White	M	126	94	DOD normotensive
66249	0:44:53	CT ABDOMEN W IV CONTRAST	8/14/2010 1:39	26	White	M	176	85	DOD normotensive
66703	0:52:11	CT ABDOMEN W IV CONTRAST	4/12/2010 10:52	43	Black	F	148	97	DOD normotensive
68795	0:49:34	CT THORAX W IV CONTRAST	9/9/2009 2:54	35	White	M	181	66	DOD normotensive
68796	0:35:48	CT THORAX W IV CONTRAST	3/20/2008 15:26	31	White	M	133	84	DOD normotensive
68797	0:38:21	CT THORAX W IV CONTRAST	9/22/2008 9:26	36	White	M	149	100	DOD normotensive
68799	2:05:16	CT THORAX W IV CONTRAST	12/31/2007 14:32	36	White	M	186	68	DOD normotensive
68800	14:27:18	CT THORAX W IV CONTRAST	6/6/2010 22:24	45	White	F	145	80	DOD normotensive
68802	0:28:11	CT THORAX W IV CONTRAST	12/14/2010 11:21	41	White	M	159	95	DOD normotensive
68803	0:38:50	CT THORAX W IV CONTRAST	11/1/2010 2:06	19	White	M	143	96	DOD normotensive
68804	0:30:44	CT THORAX W IV CONTRAST	10/2/2010 14:11	19	White	M	144	84	DOD normotensive
68806	1:18:57	CT THORAX W IV CONTRAST	4/15/2012 18:16	18	White	M	159	86	DOD normotensive
68807	0:45:29	CT THORAX W IV CONTRAST	2/4/2012 5:45	25	Black	F	129	94	DOD normotensive
68808	5:07:02	CT THORAX W IV CONTRAST	12/5/2011 3:06	37	White	M	135	98	DOD normotensive
68812	12:30:17	CT ANGIO CHEST WO AND W CONTRAST	8/1/2012 8:03	23	White	F	134	76	DOD normotensive
68816	0:56:24	CT THORAX W IV CONTRAST	11/16/2012 14:29	33	White	F	132	84	DOD normotensive
68817	0:56:24	CT THORAX W IV CONTRAST	1/17/2013 9:48	39	White	M	203	82	DOD normotensive
71347	1:04:58	CT THORAX W IV CONTRAST	3/13/2013 19:31	42	White	M	173	56	DOD normotensive
71930	1:26:33	CT ABDOMEN W IV CONTRAST	6/14/2006 15:45	25	White	M	131	60	DOD normotensive
71931	0:58:06	CT ABDOMEN W IV CONTRAST	7/29/2006 3:49	19	White	M	159	90	DOD normotensive
71932	0:39:23	CT THORAX W IV CONTRAST	7/25/2006 20:40	28	White	M	145	88	DOD normotensive
71933	1:18:51	CT THORAX W IV CONTRAST	8/12/2006 18:03	21	White	F	131	65	DOD normotensive
71934	3:30:10	CT THORAX W IV CONTRAST	6/10/2006 15:44	19	White	M	146	50	DOD normotensive
71935	1:13:00	CT ABDOMEN W IV CONTRAST	7/17/2006 19:16	19	White	M	164	86	DOD normotensive
71936	1:22:49	CT ABDOMEN WO IV CONTRAST	10/10/2006 3:09	39	White	M	157	96	DOD normotensive
71937	1:38:54	CT THORAX W IV CONTRAST	7/1/2006 0:27	50	White	M	133	72	DOD normotensive
71938	2:46:15	CT ANGIO CHEST WO AND W CONTRAST	10/22/2010 21:40	50	White	F	147	74	DOD normotensive
71939	6:09:49	CT THORAX W IV CONTRAST	8/6/2006 21:58	32	White	M	125	70	DOD normotensive
71940	1:29:22	CT THORAX W IV CONTRAST	9/22/2005 6:24	22	White	M	197	95	DOD normotensive
71941	1:01:10	CT ABDOMEN W IV CONTRAST	7/20/2006 12:09	37	White	M	144	72	DOD normotensive
71942	1:04:45	CT ABDOMEN W IV CONTRAST	9/19/2005 22:10	23	Hispanic	M	125	64	DOD normotensive
71943	1:43:10	CT THORAX W IV CONTRAST	6/18/2006 17:07	49	White	M	154	74	DOD normotensive
71945	1:20:12	CT THORAX W IV CONTRAST	7/17/2005 3:04	42	White	F	123	92	DOD normotensive



**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
71946	1:40:33	CT THORAX W IV CONTRAST	10/1/2005 13:25	46	White	M	165	74	DOD normotensive
71947	0:45:47	CT THORAX WO IV CONTRAST	9/23/2005 6:27	30	Black	F	164	93	DOD normotensive
71948	0:52:53	CT THORAX W IV CONTRAST	10/29/2005 4:48	26	Black	M	193	86	DOD normotensive
71949	0:51:39	CT ABDOMEN W IV CONTRAST	9/14/2005 14:25	29	White	M	154	90	DOD normotensive
71950	-03:19:32	CT OUTSIDE FILM CONSULT CHEST	8/24/2007 22:05	18	Other	M	147	54	DOD normotensive
71951	-01:59:22	CT OUTSIDE FILM CONSULT ABDOMEN	11/27/2010 23:02	21	White	F	143	89	DOD normotensive
71952	1:17:44	CT THORAX W IV CONTRAST	8/3/2006 18:41	30	White	M	152	67	DOD normotensive
71953	-03:59:14	CT OUTSIDE FILM CONSULT CHEST	12/17/2009 20:39	50	White	M	151	87	DOD normotensive
71954	1:04:02	CT THORAX W IV CONTRAST	10/29/2011 0:54	21	Black	M	129	85	DOD normotensive
71955	1:01:15	CT ABDOMEN W IV CONTRAST	10/3/2005 1:07	47	Black	F	180	86	DOD normotensive
71956	1:59:27	CT THORAX W IV CONTRAST	7/20/2006 13:07	33	White	F	131	80	DOD normotensive
71957	0:47:07	CT THORAX W IV CONTRAST	7/11/2005 6:34	22	White	M	152	68	DOD normotensive
71958	0:49:53	CT THORAX W IV CONTRAST	5/10/2007 8:26	47	Other	M	152	87	DOD normotensive
71959	-01:50:50	CT OUTSIDE FILM CONSULT ABDOMEN	6/26/2008 2:11	19	White	M	151	98	DOD normotensive
71960	1:13:22	CT ABDOMEN W IV CONTRAST	10/10/2005 7:58	42	White	M	159	99	DOD normotensive
71961	1:06:45	CT ABDOMEN W IV CONTRAST	12/17/2005 12:01	47	White	F	161	70	DOD normotensive
71962	1:36:16	CT ABDOMEN W IV CONTRAST	10/9/2005 0:52	22	White	M	139	84	DOD normotensive
71963	0:48:07	CT ABDOMEN W IV CONTRAST	11/8/2006 21:43	20	White	M	165	91	DOD normotensive
71964	0:58:25	CT THORAX W IV CONTRAST	6/10/2006 18:59	25	White	M	169	81	DOD normotensive
71965	8:39:23	CT ABDOMEN W IV CONTRAST	7/8/2006 21:10	25	White	F	121	66	DOD normotensive
71966	-04:54:32	CT OUTSIDE FILM CONSULT ABDOMEN	3/10/2010 21:44	22	Black	M	159	64	DOD normotensive
71967	1:57:30	CT ABDOMEN W IV CONTRAST	4/30/2005 23:56	21	White	M	144	82	DOD normotensive
71968	0:56:09	CT THORAX W IV CONTRAST	9/4/2010 19:35	21	Black	M	122	74	DOD normotensive
71969	8:30:48	CT ABDOMEN W IV CONTRAST	6/7/2005 15:53	49	Black	M	153	80	DOD normotensive
71970	-05:03:08	CT OUTSIDE FILM CONSULT CHEST	2/21/2009 15:49	42	White	M	141	98	DOD normotensive
71971	0:54:35	CT THORAX W IV CONTRAST	8/25/2005 18:51	43	White	M	142	83	DOD normotensive
71972	4:21:20	CT ABDOMEN W IV CONTRAST	9/21/2005 23:19	29	White	M	161	78	DOD normotensive
71973	5:59:31	CT THORAX W IV CONTRAST	8/25/2005 2:35	48	White	F	140	86	DOD normotensive
71974	0:46:00	CT ABDOMEN W IV CONTRAST	10/30/2005 17:33	38	White	M	153	90	DOD normotensive
71975	2:24:31	CT ABDOMEN W IV CONTRAST	6/19/2006 21:17	20	White	M	182	88	DOD normotensive
71976	0:41:57	CT ABDOMEN W IV CONTRAST	11/3/2005 13:31	21	White	M	159	74	DOD normotensive
71977	-01:09:08	CT OUTSIDE FILM CONSULT ABDOMEN	5/23/2008 0:02	18	White	M	127	58	DOD normotensive
71978	0:48:54	CT ABDOMEN W IV CONTRAST	8/1/2005 19:35	45	White	M	164	66	DOD normotensive
71979	8:31:18	CT ABDOMEN W IV CONTRAST	5/6/2005 10:11	27	White	F	137	82	DOD normotensive
71980	-03:11:28	CT OUTSIDE FILM CONSULT ABDOMEN	9/6/2005 23:00	25	White	M	153	74	DOD normotensive
72572	0:49:40	CT THORAX W IV CONTRAST	9/1/2011 15:27	33	White	M	142	91	DOD normotensive
72573	-02:52:43	CT OUTSIDE FILM CONSULT CHEST	7/5/2010 2:27	26	White	M	149	98	DOD normotensive
72574	-01:43:25	CT OUTSIDE FILM CONSULT ABDOMEN AND PELVIS	6/24/2011 23:50	49	White	M	131	96	DOD normotensive
72575	-04:29:13	CT OUTSIDE FILM CONSULT ABDOMEN	12/18/2010 23:49	42	Other	M	122	79	DOD normotensive
72576	1:51:28	CT ABDOMEN W IV CONTRAST	10/21/2006 11:06	47	White	M	134	62	DOD normotensive
72577	-03:24:32	CT OUTSIDE FILM CONSULT ABDOMEN	12/2/2010 21:04	35	Hispanic	M	153	70	DOD normotensive
72578	-02:56:32	CT OUTSIDE FILM CONSULT CHEST	1/7/2011 16:32	25	White	M	175	79	DOD normotensive
72579	1:49:07	CT ABDOMEN W IV CONTRAST	7/22/2006 19:36	45	White	M	136	99	DOD normotensive
72580	1:58:02	CT ABDOMEN W IV CONTRAST	7/11/2004 5:03	47		M	137	94	DOD normotensive
72581	2:38:30	CT ABDOMEN W IV CONTRAST	7/24/2004 9:02	23	White	F	125	85	DOD normotensive
72582	11:09:04	CT ABDOMEN W IV CONTRAST	11/1/2009 11:27	19	White	M	148	89	DOD normotensive
72583	1:25:39	CT ABDOMEN W IV CONTRAST	7/29/2006 21:10	31	White	M	142	95	DOD normotensive
72584	0:35:59	CT ABDOMEN PELVIS W IV CONTRAST	9/30/2012 21:27	34	White	M	145	96	DOD normotensive
72585	-02:59:46	CT OUTSIDE FILM CONSULT ABDOMEN	8/30/2007 22:08	50	White	M	164	97	DOD normotensive
72586	-02:07:21	CT OUTSIDE FILM CONSULT ABDOMEN	8/6/2007 13:30	47	Black	F	159	64	DOD normotensive
72587	0:56:16	CT ABDOMEN W IV CONTRAST	7/29/2006 19:46	46	Black	M	137	90	DOD normotensive
72588	-04:30:42	CT OUTSIDE FILM CONSULT CHEST	10/7/2010 15:35	46	White	M	156	95	DOD normotensive

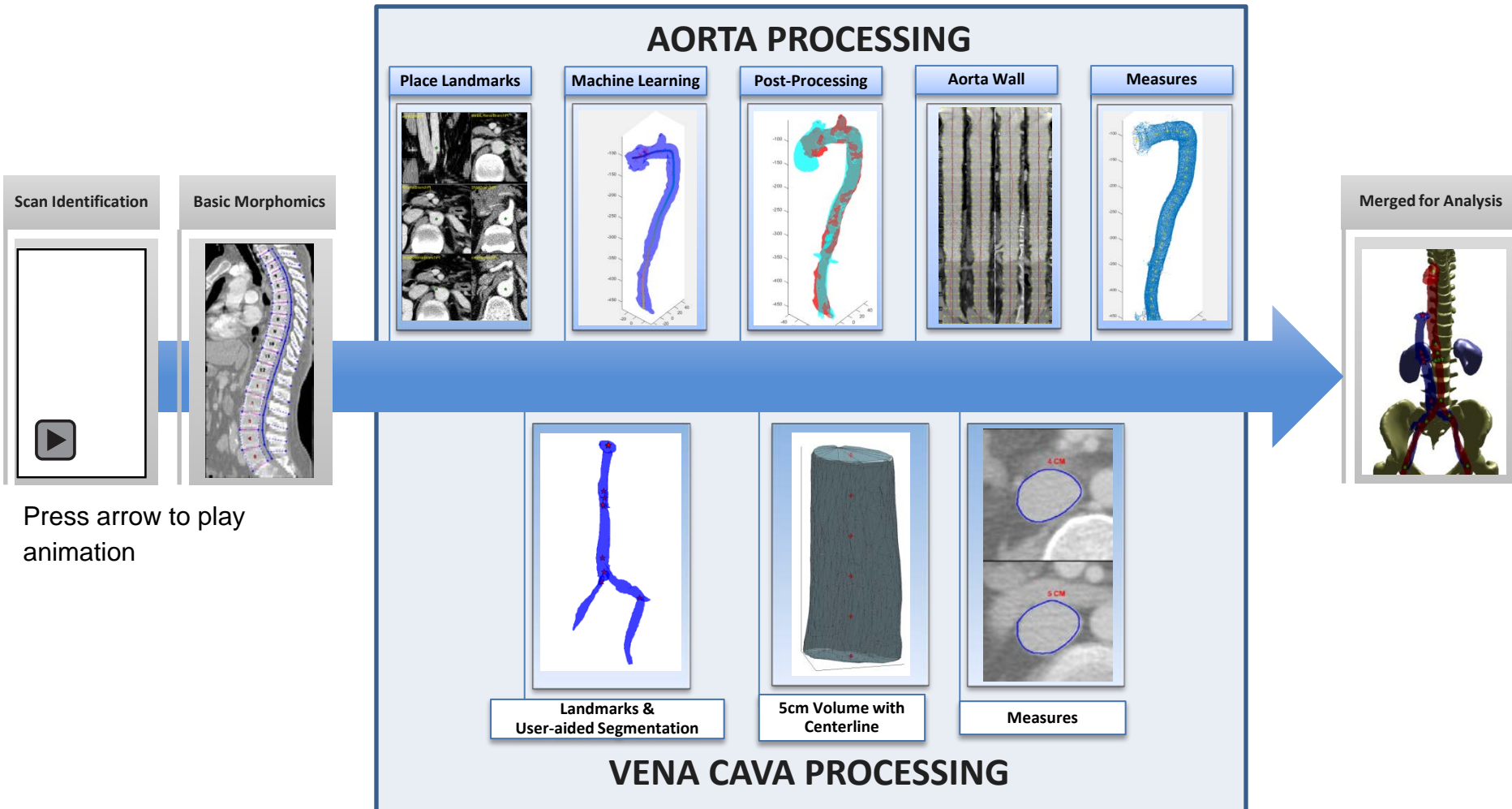
**Appendix A**  
**Civilian Patient List**

Study ID	Time to Scan	Study Description	Study Date/Time	Age	Race	Sex	ED BP	ED Pulse	Tag
72589	6:55:41	CT ABDOMEN W IV CONTRAST	10/14/2005 0:58	23	Black	M	182	80	DOD normotensive
72590	1:21:43	CT ABDOMEN W IV CONTRAST	7/11/2004 4:26	22	White	M	137	96	DOD normotensive
72591	1:04:19	CT ABDOMEN PELVIS W IV CONTRAST	4/19/2012 3:13	24	Asian	M	120	96	DOD normotensive
72592	1:43:27	CT ABDOMEN W IV CONTRAST	2/7/2005 7:12	27	Black	M	148	83	DOD normotensive
72593	3:11:40	CT ABDOMEN W IV CONTRAST	1/6/2005 20:43	38	White	M	153	83	DOD normotensive
72594	-04:01:47	CT OUTSIDE FILM CONSULT CHEST	5/18/2006 17:05	28	White	M	142	92	DOD normotensive
72595	-02:19:46	CT OUTSIDE FILM CONSULT CHEST	10/29/2008 17:04	18	Black	M	153	95	DOD normotensive
72596	0:47:16	CT ABDOMEN W IV CONTRAST	8/29/2004 6:59	24	White	M	140	77	DOD normotensive
72597	0:43:14	CT ABDOMEN W IV CONTRAST	8/27/2004 3:24	34	Black	M	126	79	DOD normotensive
72598	0:45:49	CT ABDOMEN W IV CONTRAST	7/22/2004 6:54	24	White	M	133	80	DOD normotensive
72599	0:55:58	CT ABDOMEN W IV CONTRAST	8/24/2004 20:29	46	White	M	158	79	DOD normotensive
72600	1:21:40	CT ABDOMEN W IV CONTRAST	10/6/2004 6:02	26	White	M	148	93	DOD normotensive
72601	1:05:11	CT ABDOMEN W IV CONTRAST	9/10/2004 15:58	28	White	M	138	98	DOD normotensive
72602	15:17:39	CT ABDOMEN W IV CONTRAST	6/17/2006 17:49	33	White	M	125	49	DOD normotensive
72603	1:46:26	CT ABDOMEN W IV CONTRAST	9/18/2006 10:20	29	Hispanic	M	163	95	DOD normotensive
72604	-01:24:19	CT OUTSIDE FILM CONSULT CHEST	3/21/2006 13:05	48	White	M	155	70	DOD normotensive

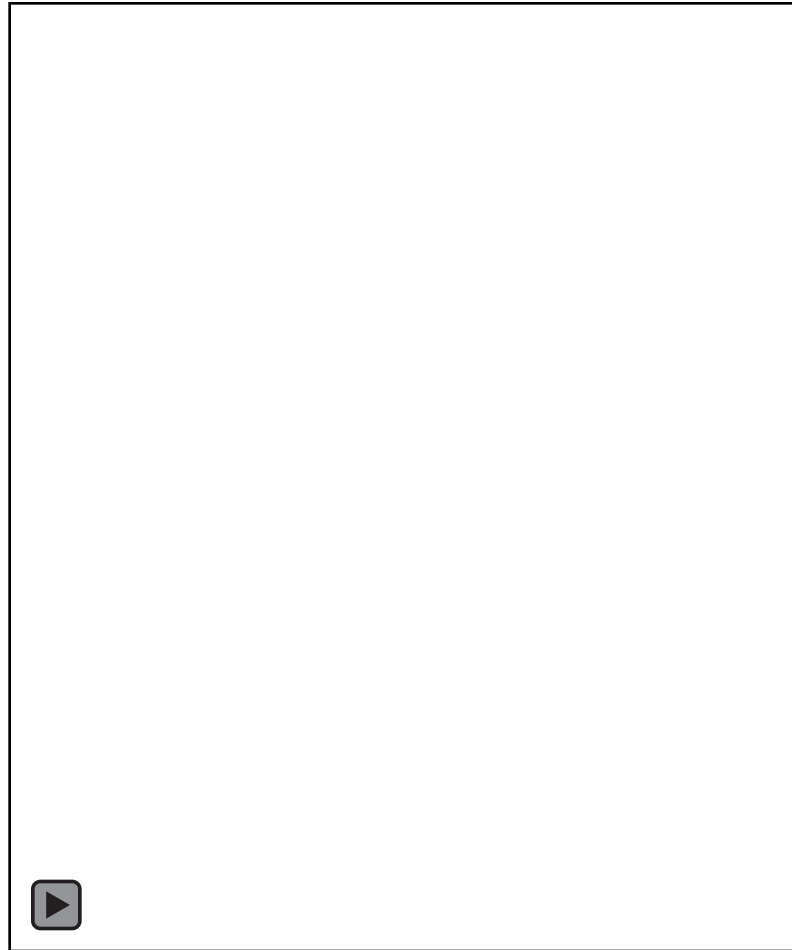
# **APPENDIX B**

Vascular Processing Videos

# Vascular Processing Methodology



# Aorta Centerline



Press arrow to play animation

# Segmented Aorta and Vena Cava in situ

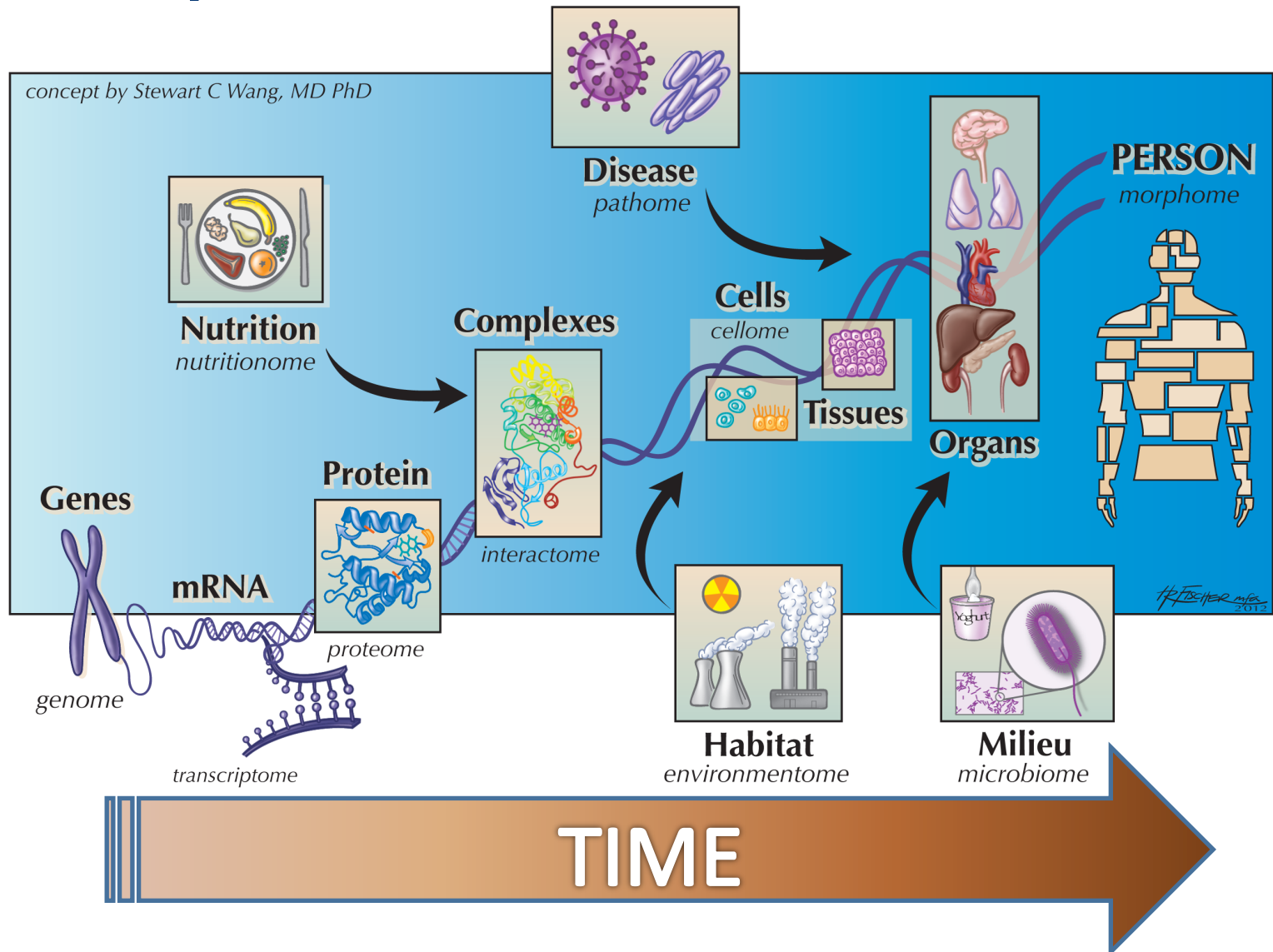


Press arrow to play animation

# **APPENDIX C**

## Morphomics Overview

# Morphomics = Personalized Medicine

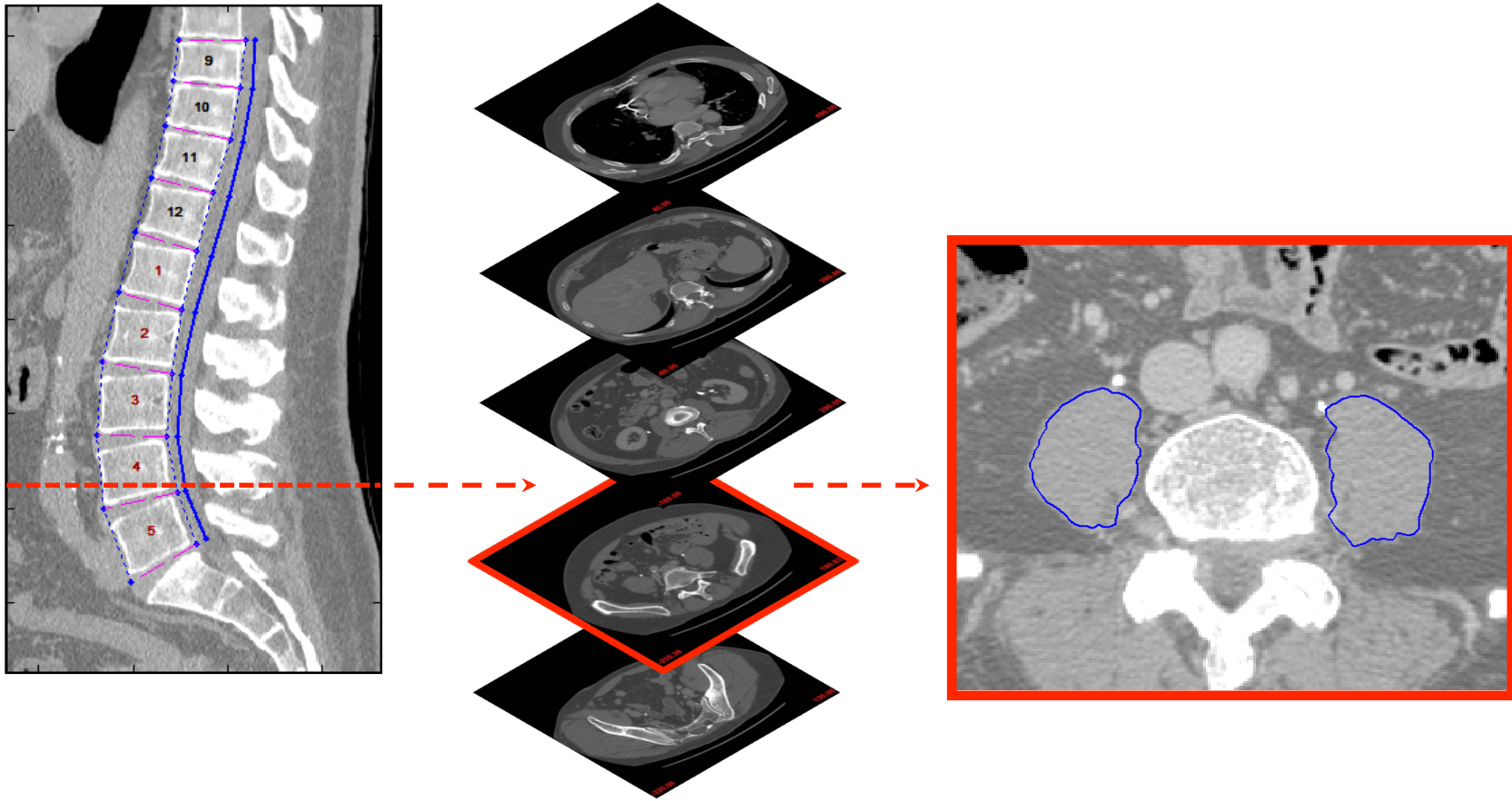




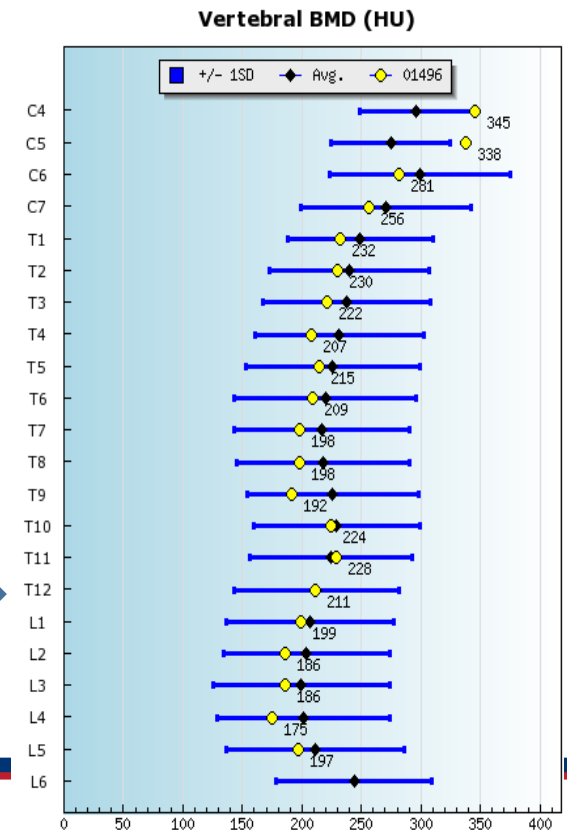
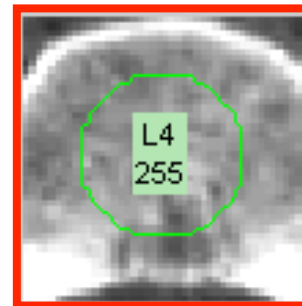
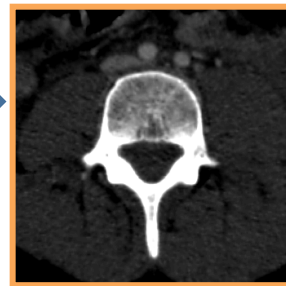
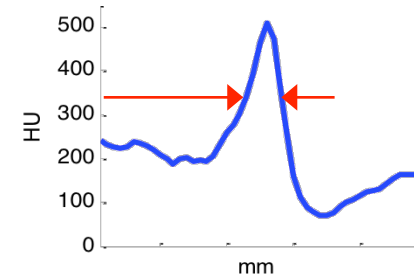
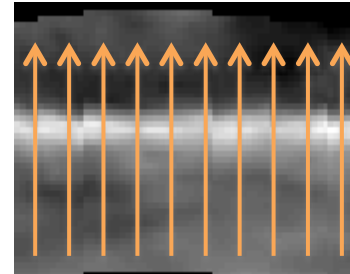
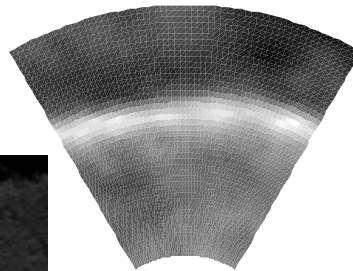
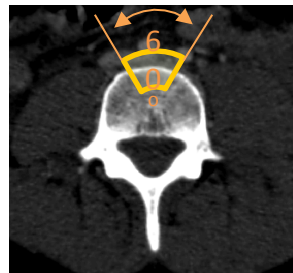
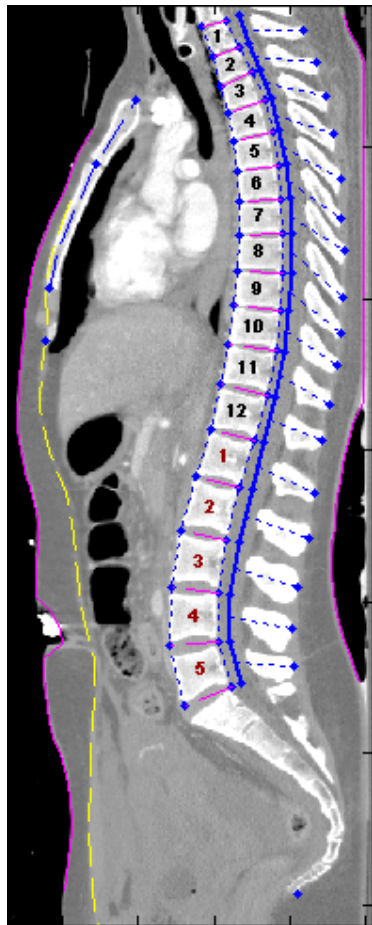
# Morphomics = Personalized Medicine

- **Multiplex** tool for patient diagnosis and stratification.
- Morphomics is based on highly-automated, high-throughput image processing to quantify millions of anatomically-indexed measures from a single patient's scan, offering remarkable opportunities for personalized treatment and surgical planning.
- Imaging data has been preserved in pristine condition (**BUT NOT USED**) while patients' response to treatment has been observed. .. Natural experiments
- Each patient's individual morphometric qualities are then assessed against population-based standards to identify patient-specific risk factors
- Morphomic assessment of trunk musculature (density and mass), body composition (fat distribution), vascular calcification, and solid organ morphomic measures have demonstrated that these patient-specific variables dominate risk prediction models and provide critical insight into patient risk. Thousands of other potential biomarkers are being tested.

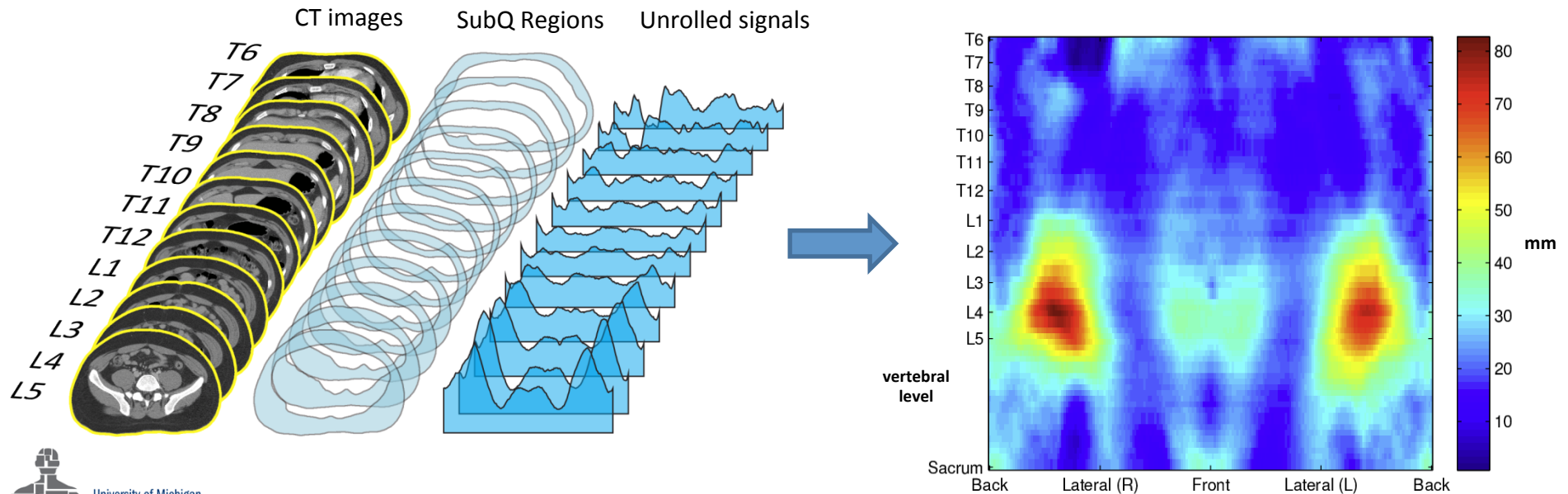
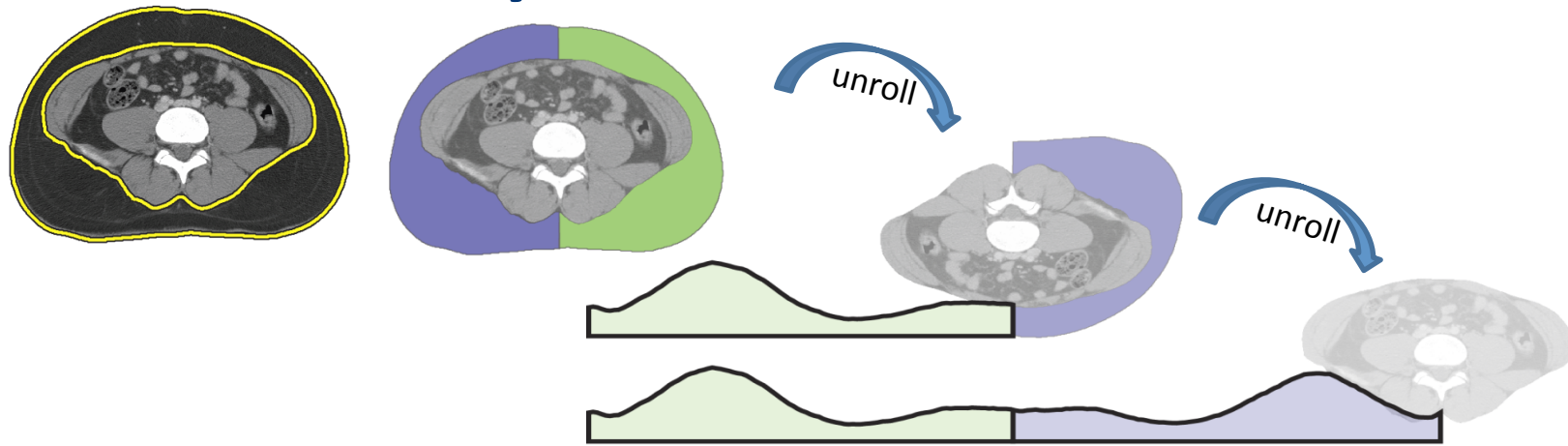
# Muscle Health/Sarcopenia



# Bone Health



# Obesity – Fat Characterization



# **APPENDIX D**

## **Initial Data Analysis**

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# Data Presentation



# Aorta Radius Population

	Normotensive	Hypotensive	ECG
# CT Scans (Aorta processed)	959	63	46
Female	24%	40%	24%
Male	76%	57%	76%
Mean Age	33.1	34.1	32.2
Std. Dev. Age	10.0	10.6	10.2
Min Age	18	18	18
Max Age	50	50	50
Mean Height (m)	1.7	1.7	1.7
Mean Weight (kg)	83.8	85.3	76.8

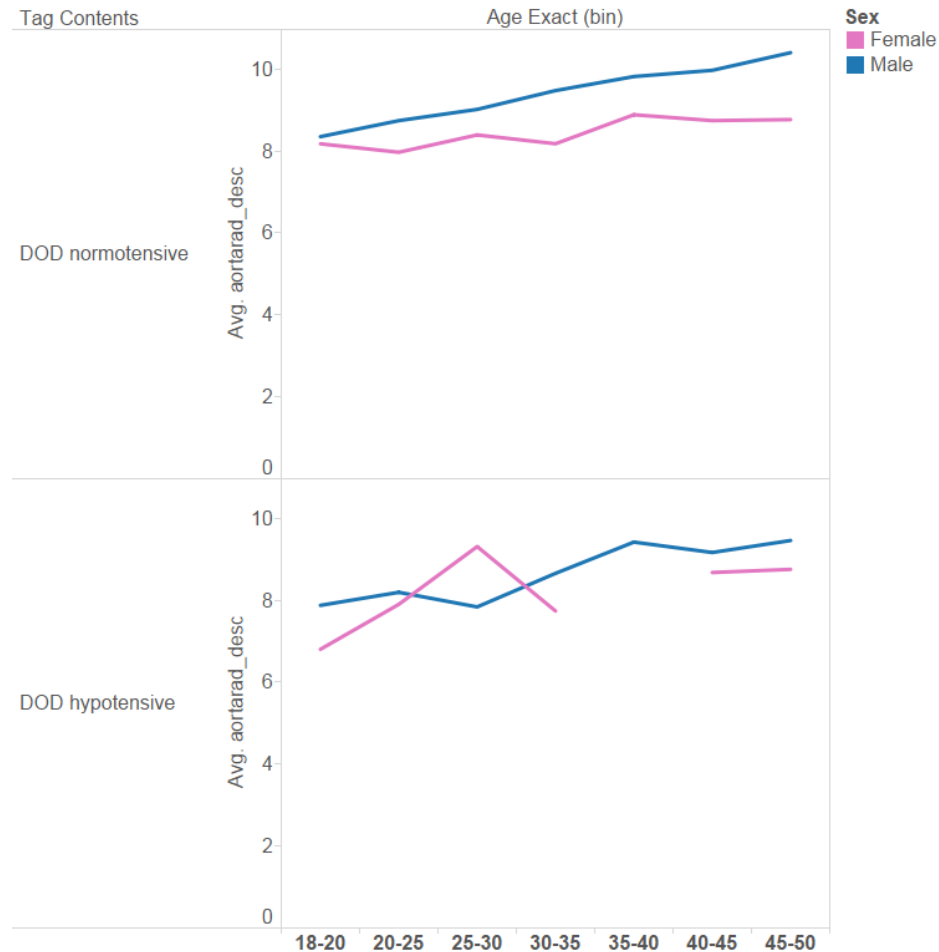
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# CROSS-GENDER COMPARISONS



# Avg. Descending Aorta Radius

## by Sex, Age, Hemodynamic Status



Descending aorta radius measurements at T3-L3 (mm)



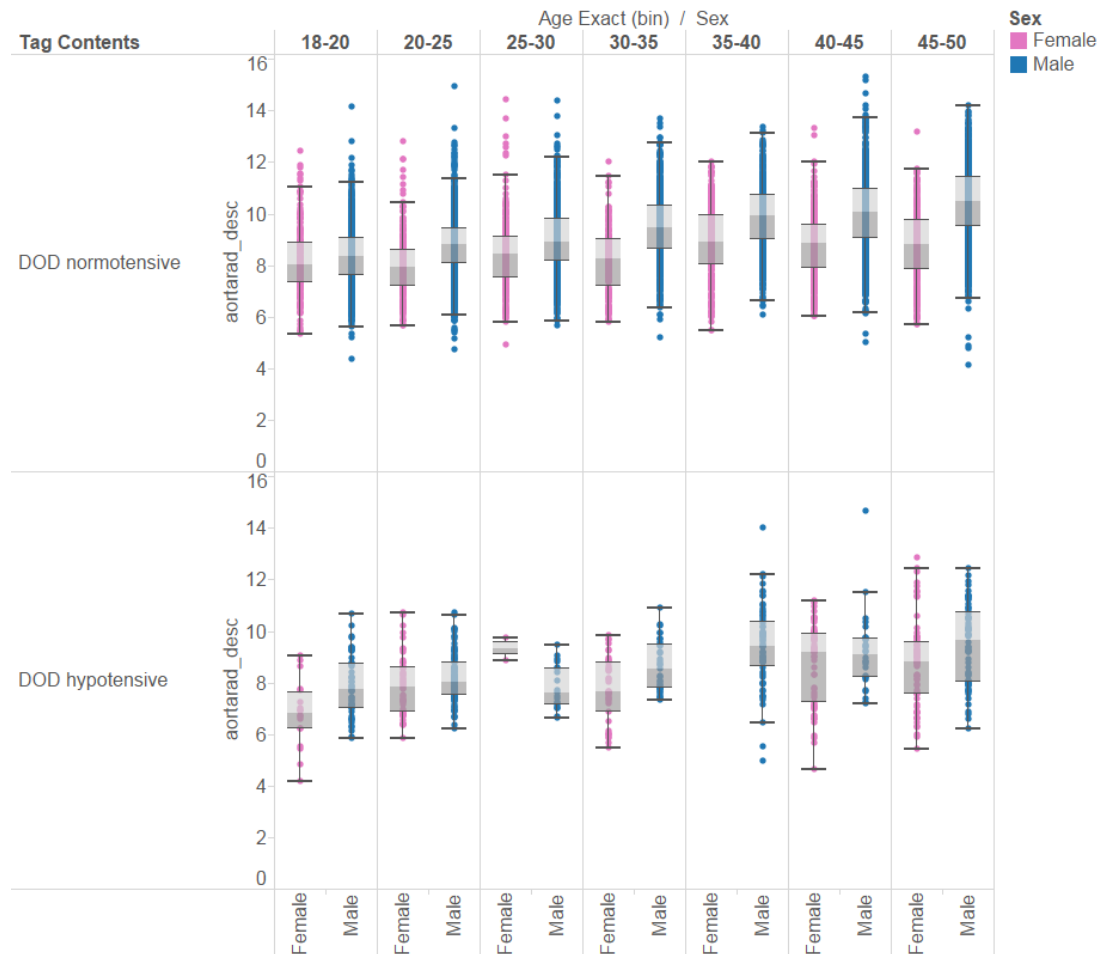
University of Michigan

**MAG**

**Morphomic  
Analysis Group**

# Descending Aorta Radius

## by Sex, Age, Hemodynamic Status



Descending aorta radius measurements at T3-L3 (mm)



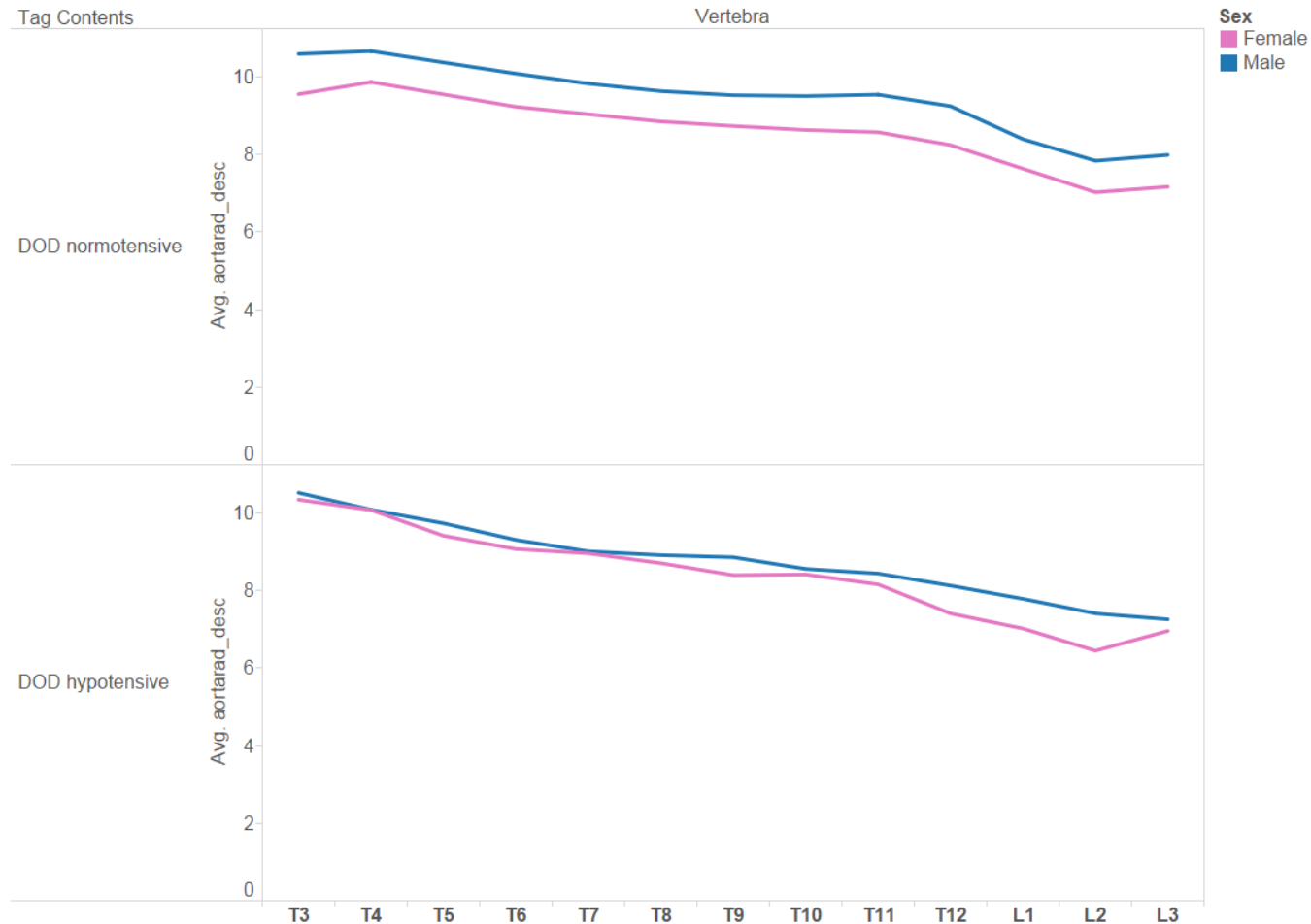
University of Michigan

**MAG**

**Morphomic  
Analysis Group**

# Avg. Descending Aorta Radius

## by Sex, Vertebra, Hemodynamic Status



Descending aorta radius measurements at T3-L3 (mm)



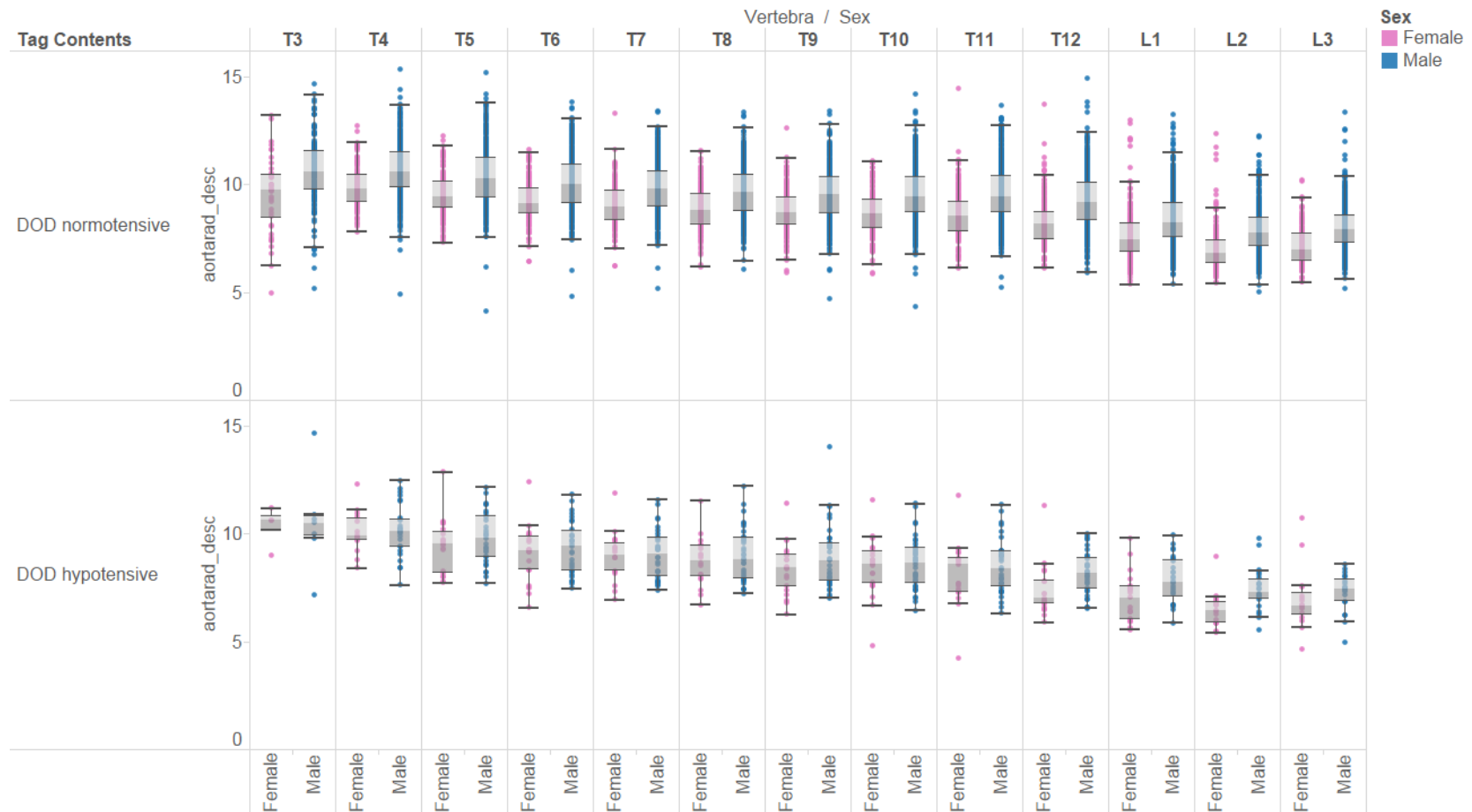
University of Michigan

**MAG**

**Morphomic  
Analysis Group**

# Descending Aorta Radius

## by Sex, Vertebra, Hemodynamic Status



Descending aorta radius measurements at T3-L3 (mm)



University of Michigan

**MAG**

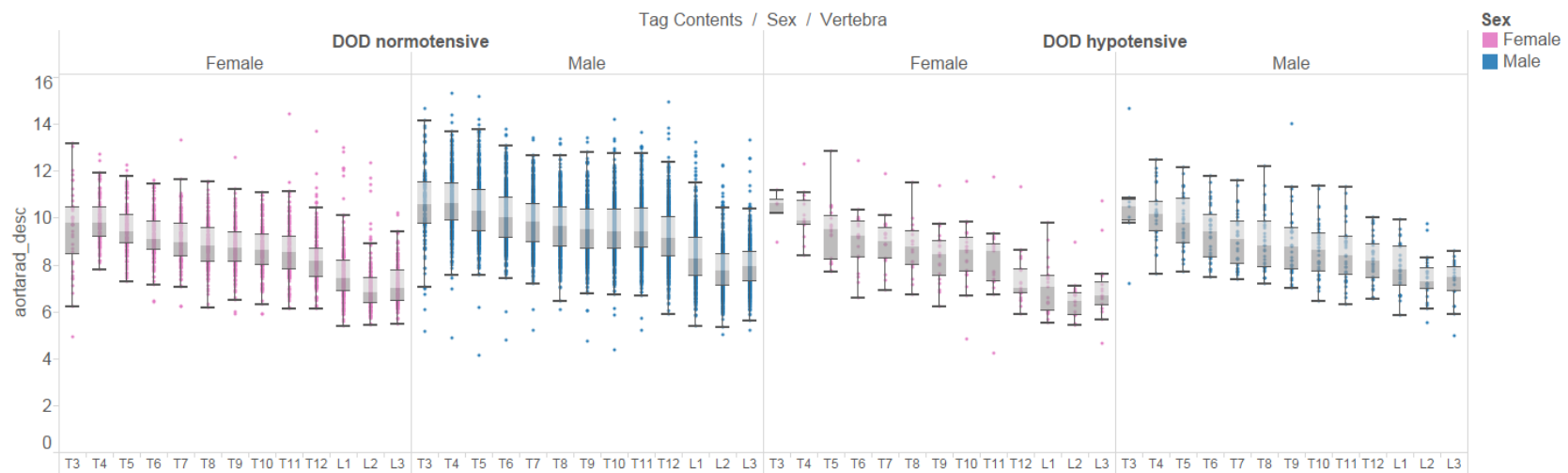
**Morphomic  
Analysis Group**

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# WITHIN-GENDER COMPARISONS

# Descending Aorta Radius

## by Hemodynamic Status, Vertebra, Sex



Descending aorta radius measurements at T3-L3 (mm)



University of Michigan

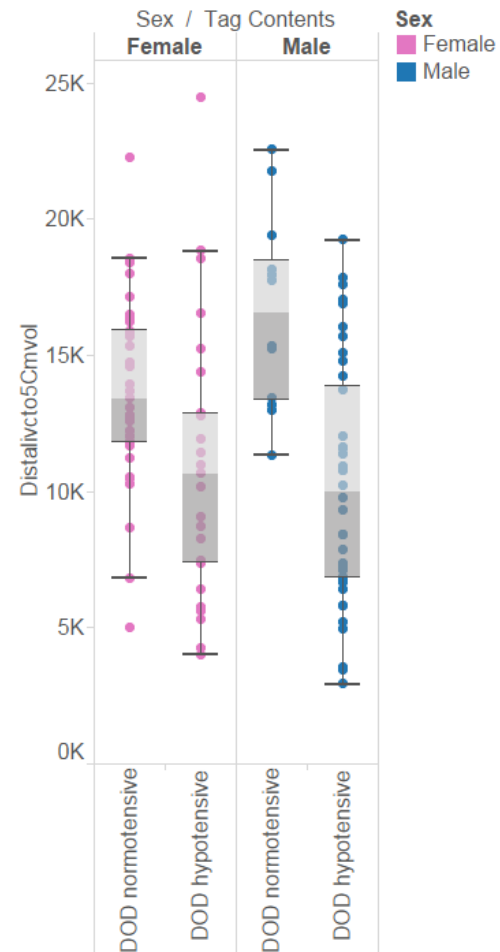
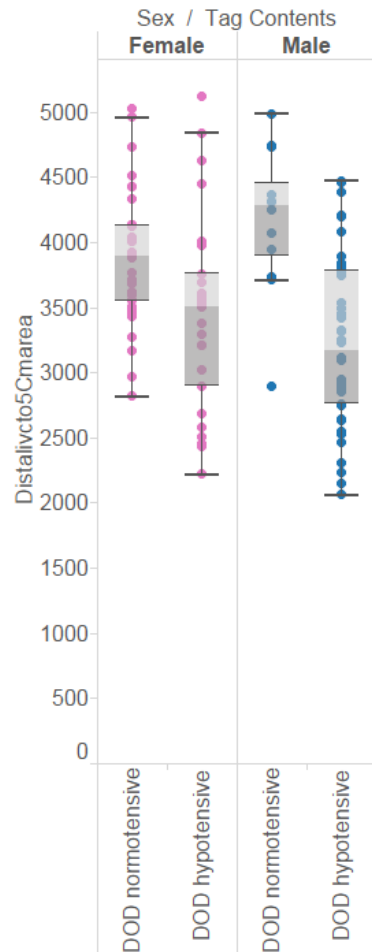
**MAG**

**Morphomic  
Analysis Group**

# Vena Cava Population

	Normotensive	Hypotensive	ECG
# CT Scans (Vena Cava processed)	49	63	2
Female	76%	38%	50%
Male	24%	62%	50%
Mean Age	32.0	33.6	20.9
Std. Dev. Age	10.7	10.6	0.3
Min Age	18	18	21
Max Age	50	50	21
Mean Height (m)	1.7	1.8	1.8
Mean Weight (kg)	72.0	88.8	69.0

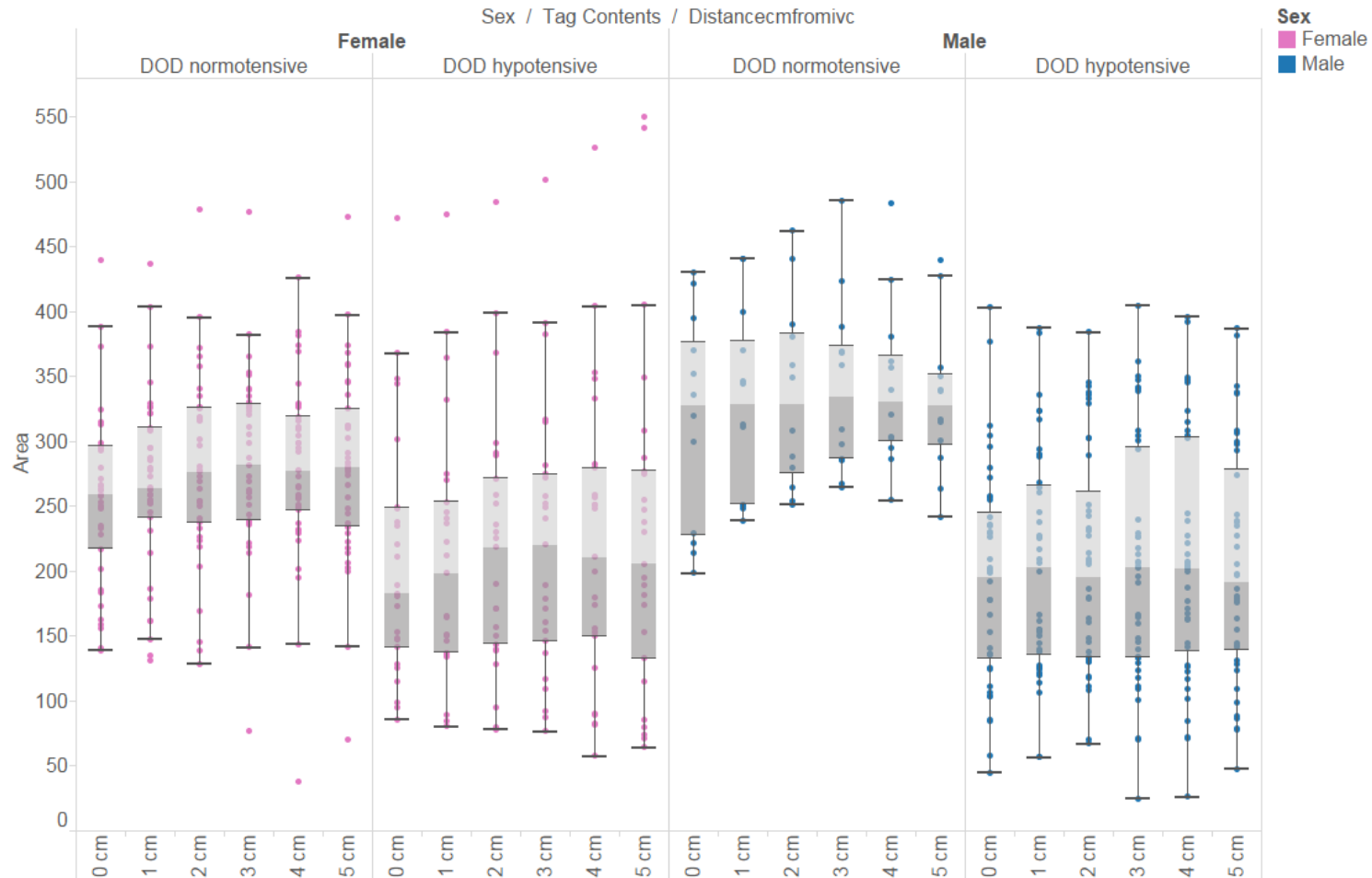
# Vena Cava Area, Volume by Hemodynamic Status, Sex



Vena cava measurements from IVC to 5 cm

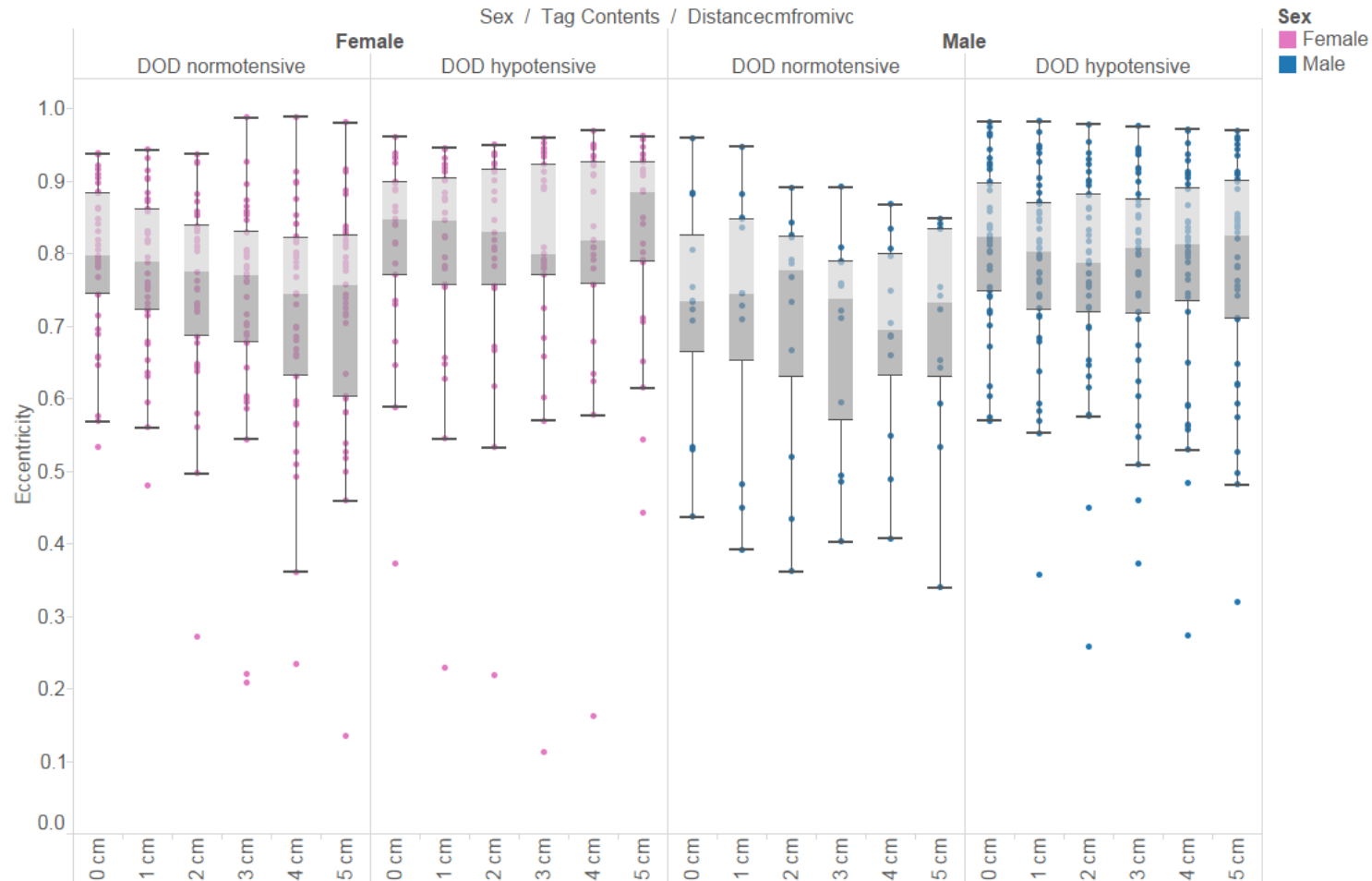


# Vena Cava Area by Sex, Hemodynamic Status



Vena cava measurements at 1 cm intervals from IVC to 5 cm

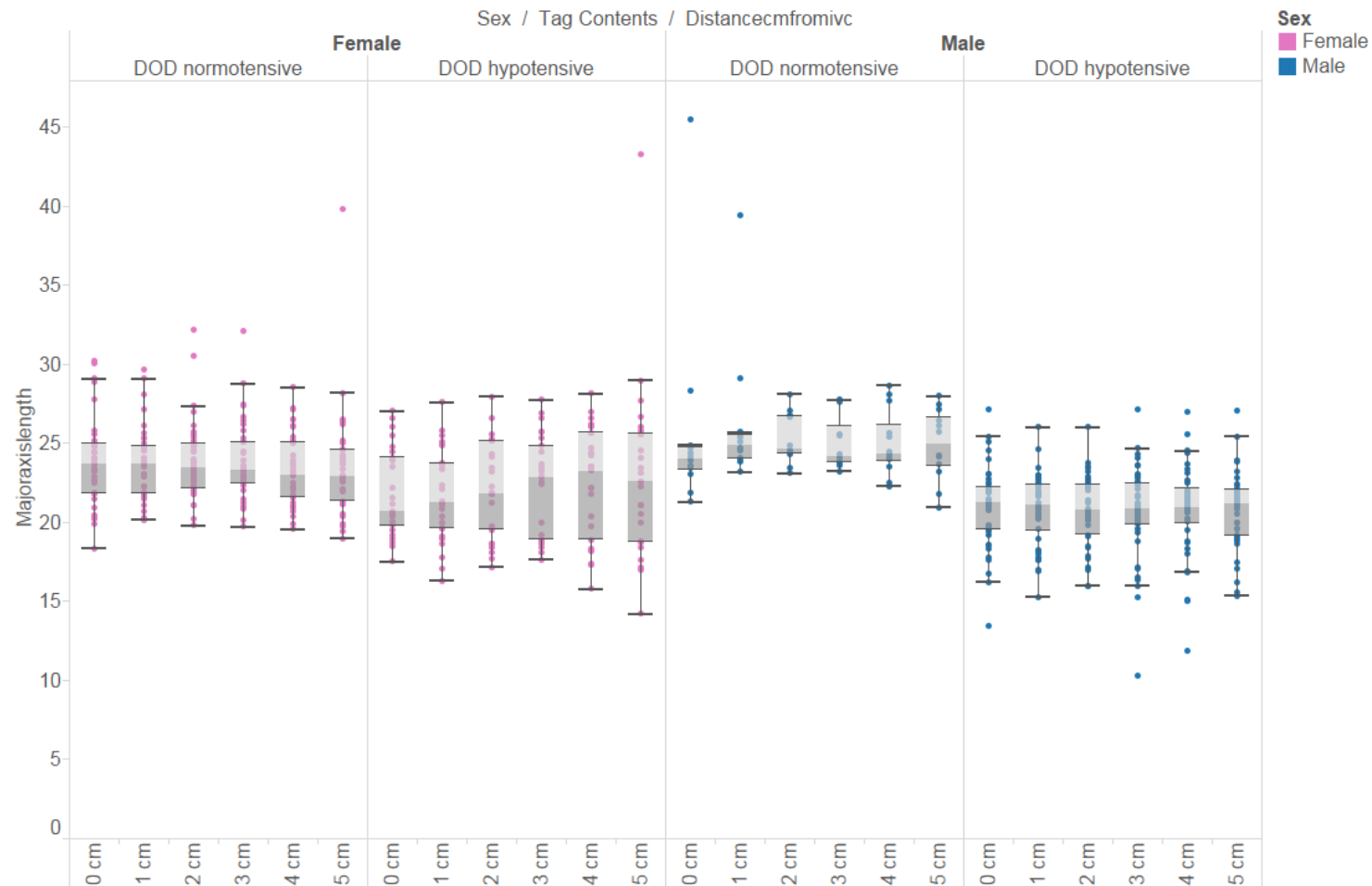
# Vena Cava Eccentricity by Sex, Hemodynamic Status



Vena cava measurements at 1 cm intervals from IVC to 5 cm

# Vena Cava Major Axis Length

## by Sex, Hemodynamic Status



Vena cava measurements at 1 cm intervals from IVC to 5 cm



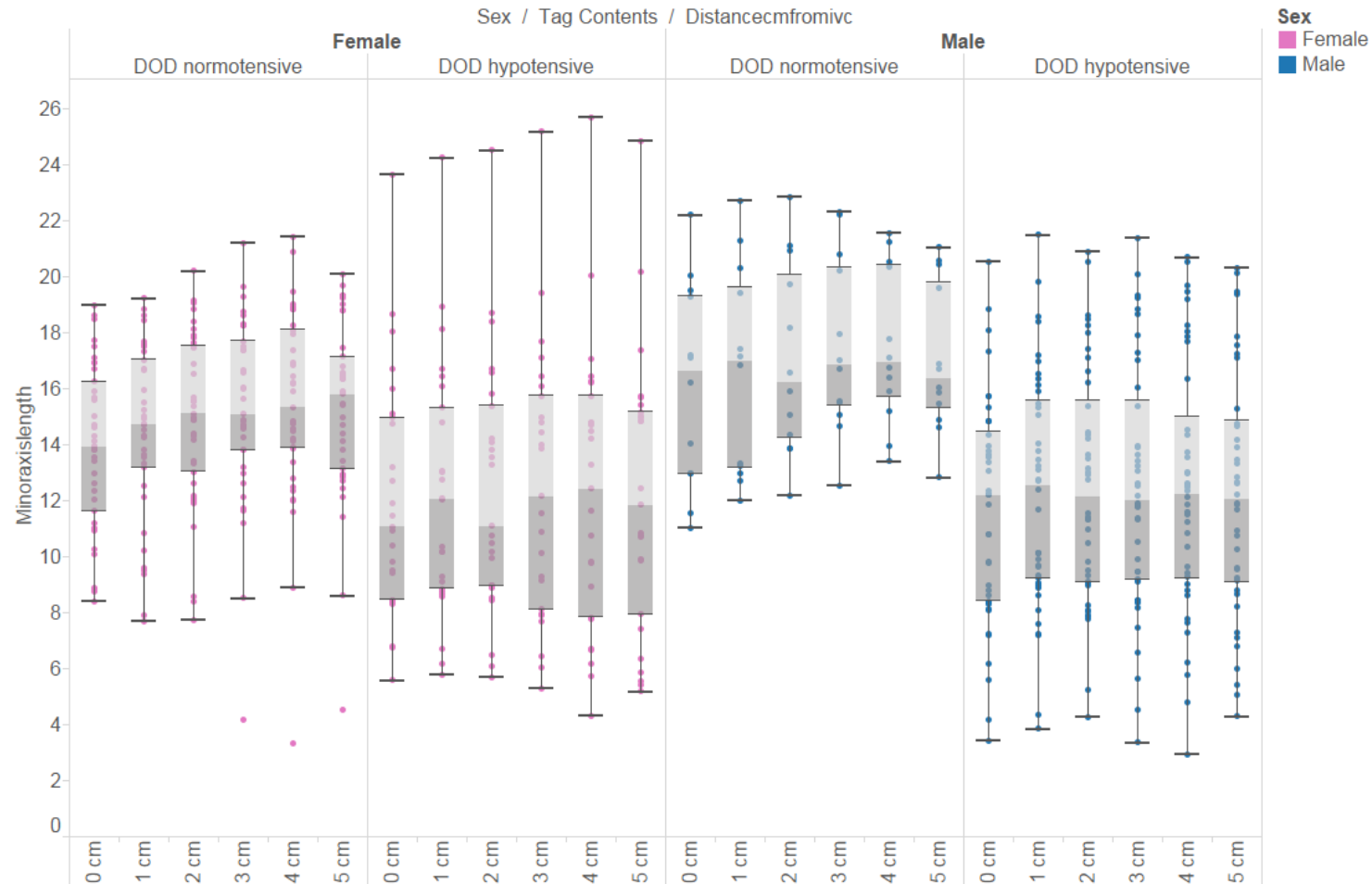
University of Michigan

**MAG**

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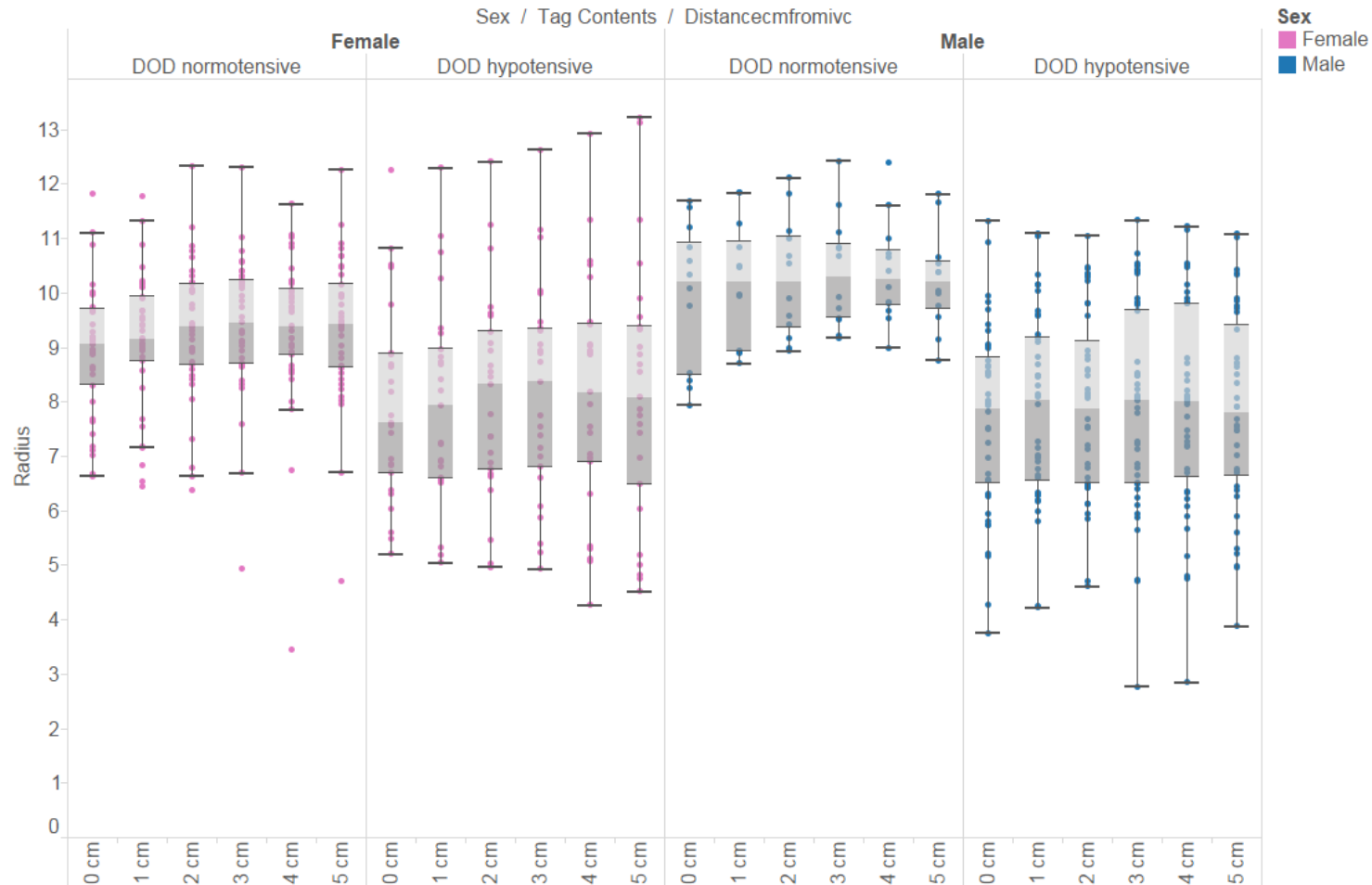
# Vena Cava Minor Axis Length

## by Sex, Hemodynamic Status



Vena cava measurements at 1 cm intervals from IVC to 5 cm

# Vena Cava Radius by Sex, Hemodynamic Status



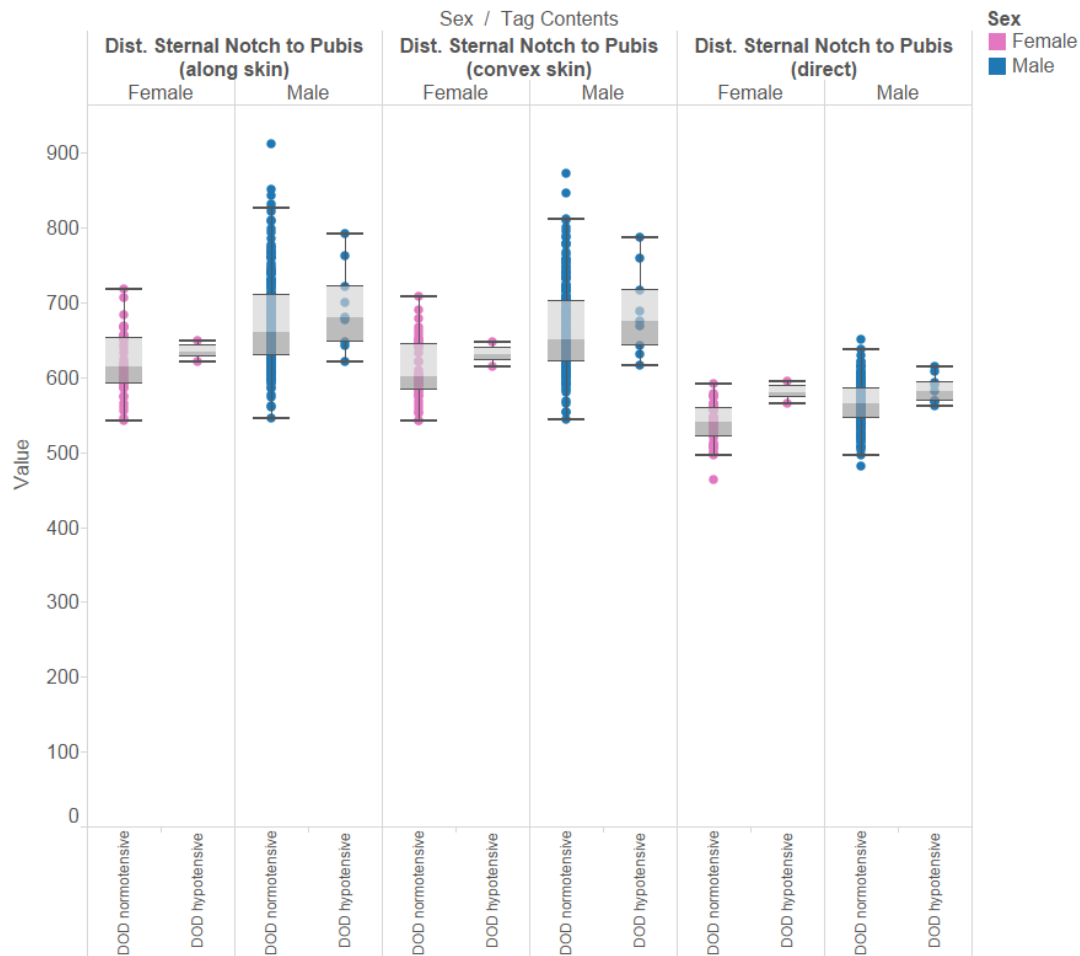
Vena cava measurements at 1 cm intervals from IVC to 5 cm

# Aorta Landmarks Population

	Normotensive	Hypotensive	ECG
# CT Scans (Aorta landmarks processed)	280	14	22
Female	20%	14%	27%
Male	80%	86%	73%
Mean Age	33.0	32.5	33.4
Std. Dev. Age	10.3	10.3	10.9
Min Age	18	18	18
Max Age	50	49	50
Mean Height (m)	1.8	1.8	1.7
Mean Weight (kg)	85.4	91.5	76.7

# Sternal Notch to Pubis Distances

## by Sex, Hemodynamic Status



Distance (mm) from sternal notch to pubis measured as: Skin Convex Hull, Along Skin, Direct



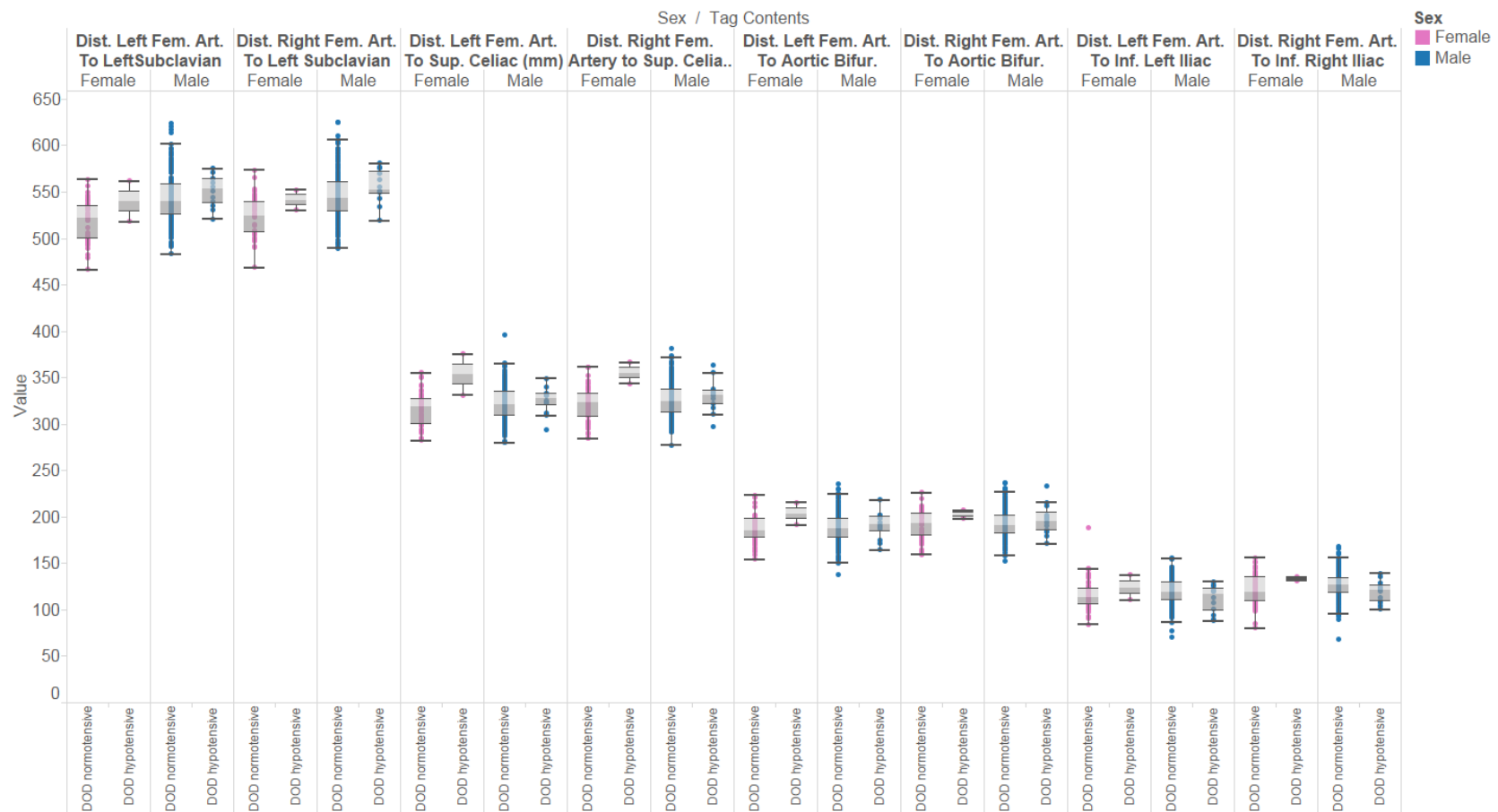
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# Vasculature Lengths

## by Sex, Hemodynamic Status

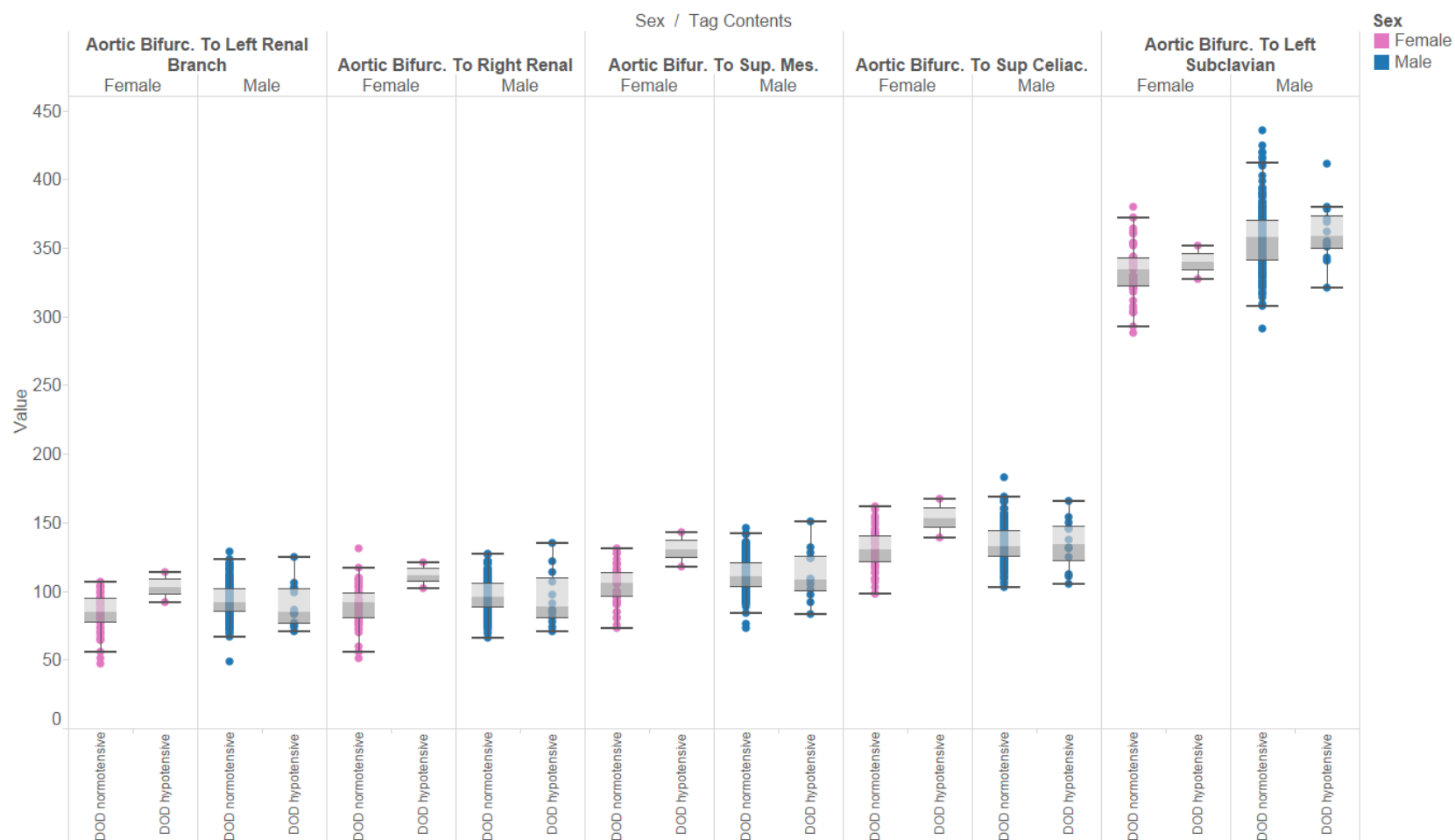


Distance (mm) from left/right femoral artery to landmark points



# Vasculature Lengths (Cont.)

## by Sex, Hemodynamic Status



Distance (mm) from aortic bifurcation to other landmark points

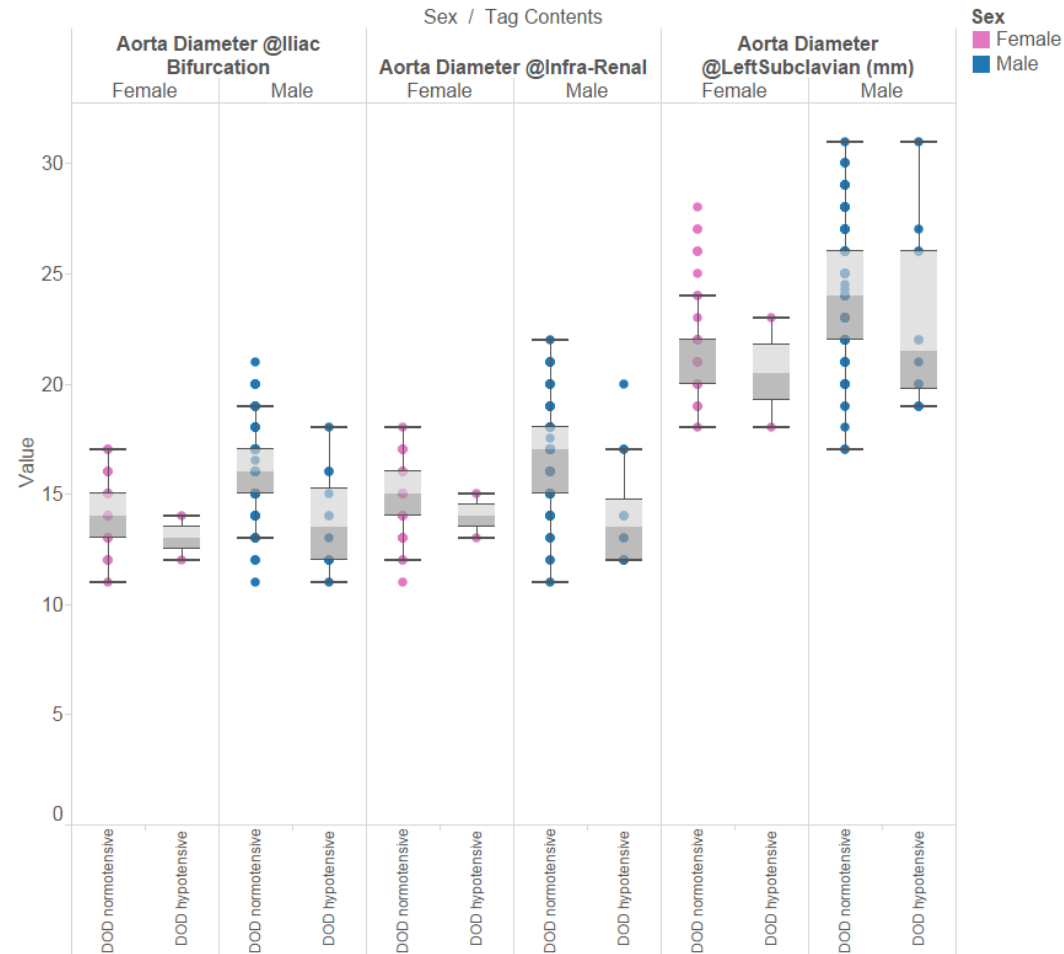


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# Aorta Diameters

## by Sex, Hemodynamic Status



Diameter (mm) of aorta at landmark points



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# Bivariate Distributions

## by Sex, Hemodynamic Status



Distance Sternal Notch to Pubis vs. Dist. Aortic Bifurcation to Left Subclavian



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# Bivariate Distributions

## by Sex, Hemodynamic Status



Distance Sternal Notch to Pubis vs. Aorta Diameter @Left Subclavian

# APPENDIX E

Year 1 Quarter 4 Quad Chart

# Characterization of Human Torso Vascular Morphometry in Normotensive and Hypotensive Trauma Patients

Log. No. 13057165

Award No. W81XWH-14-2-0126

PI: Stewart Wang, MD

Org: University of Michigan

Award Amount: \$1,104,504 Direct



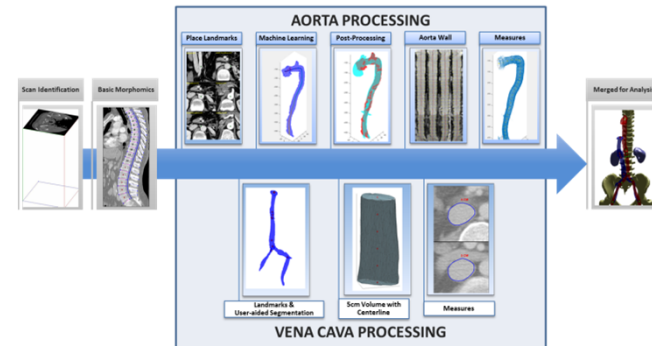
## Study Aims

- Develop accurate measurements for aortic dimensions based on hemodynamic status, body habitus, gender, and age in the civilian population
- Develop accurate measurements for venous dimensions based on hemodynamic status, body habitus, gender, and age in the civilian population
- Translate these findings to the military population and create accurate nomograms for catheter insertion and balloon inflation based on hemodynamic status, body habitus, gender, and age.

## Approach

We are developing a machine learning technique for extracting the aortic structures in a more automated fashion. This entails creating algorithms that search for circular structures in a region of interest and then reference the slices above and below to validate selection.

## Vascular Processing Methodology



**Accomplishment: Aortic Processing** Development of an algorithm to incorporate machine learning in aortic processing. **Vena Cava Processing** Identification of landmarks and strategic volumes in the vena cava processing algorithm.

## Timeline and Cost

Activities	CY	14	15
Develop accurate measurements for aortic dimensions			
Develop accurate measurements for venous dimensions			
Translate these findings to military population			
<b>Estimated Budget (\$K) Direct</b>		<b>\$541 K</b>	<b>\$563 K</b>

## Goals/Milestones

**CY14 Goal** – Aortic & Venous Dimensions for Civilian Population

% Complete	Task
100%	Identify Civilian CTs that meet criteria for study
100%	Develop landmarks for mapping aorta and vena cava
100%	Identify 50 EKG-gated and 75 Hypotensive pt CTs
100%	Develop Aortic Algorithm for Machine Processing
100%	Develop Vena Cava Algorithm
100%	Capture Civilian Demographics
75%	Process Base Morphomics on Civilian Population
50%	Process Aorta for Civilian Population
30%	Process Vena Cavae for Civilian Population

**CY15 Goals** – Translate to Military Population  
 Perform Morphomics on 500 Military CTs  
 Create nomograms for catheter & balloon inflation

## Comments/Challenges/Issues/Concerns

Access to military CTs is proving difficult to arrange.

Updated: (29 JUN 2015)

# **APPENDIX F**

## **Year 1 Quarter 4 Timeline**

<b>Contract W81XWH1420126</b>					
<b>Characterization of Human Torso Vascular Morphometry in Normotensive and Hypotensive Trauma Patients</b>					
<b>Date of Award: 30, June 2014</b>					
<b>Period of Performance: 12/30/2014 - 03/30/2015</b>					
Timeline					
Task	SOW Task #	Days from Award (DFA)	Start Date	End Date	Status
Internal Kick-Off Meeting		9 DFA	7/9/2014	7/9/2014	Completed
Kick-Off Meeting with D.O.D.		64 DFA	9/2/2014	9/2/2014	Completed
Identify 2000 Civilian CTs	1.1.1	123 DFA	6/30/2014	10/31/2014	Completed
Develop Aorta Algorithm	1.3	123 DFA	6/30/2014	10/31/2014	Completed
Identify 50 EKG-gated CTs	1.1.2	165 DFA	11/3/2014	12/12/2014	Completed
Identify 75 Internal Injury & Hypotensive CTs	1.1.3	186 DFA	11/3/2014	1/2/2015	Completed
Develop Vena Cava Algorithm	1.4	228 DFA	9/1/2014	2/13/2015	Completed
Capture Civilian Demographics	1.2	249 DFA	11/3/2014	3/6/2015	Completed
Population	1.5	270 DFA	9/1/2014	3/27/2015	Completed
Process Aorta for Civilian Population	1.6	459 DFA	9/22/2014	10/2/2015	In Progress
Process Vena Cava for Civilian Population	1.7	564 DFA	1/5/2015	1/15/2016	In Progress
Civilian Analysis	1.8	648 DFA	12/7/2015	4/8/2016	In Progress
<b>Civilian Population (Rollup)</b>	<b>1</b>	<b>648 DFA</b>	<b>6/30/2014</b>	<b>4/8/2016</b>	<b>In Progress</b>
Arrange Access to Military CTs in San Antonio	2.1	354 DFA	1/2/2015	6/19/2015	In Progress
Identify 500 CTs from Military Population	2.2	480 DFA	6/19/2015	10/23/2015	In Progress
Capture Military Demographics	2.3	564 DFA	10/23/2015	1/15/2016	
Process Base Morphomics for Military Population	2.4	564 DFA	10/23/2015	1/15/2016	
Process Aorta for Military Population	2.5	648 DFA	1/15/2016	4/8/2016	
Process Vena Cava for Military Population	2.6	662 DFA	1/15/2016	4/22/2016	
<b>Military Population (Rollup)</b>	<b>2</b>	<b>730 DFA</b>	<b>1/2/2015</b>	<b>6/29/2016</b>	<b>In Progress</b>
<b>Final Analysis</b>	<b>3</b>	<b>730 DFA</b>	<b>4/7/2016</b>	<b>6/29/2016</b>	



# APPENDIX G

Machine Learning

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# Machine Learning Review



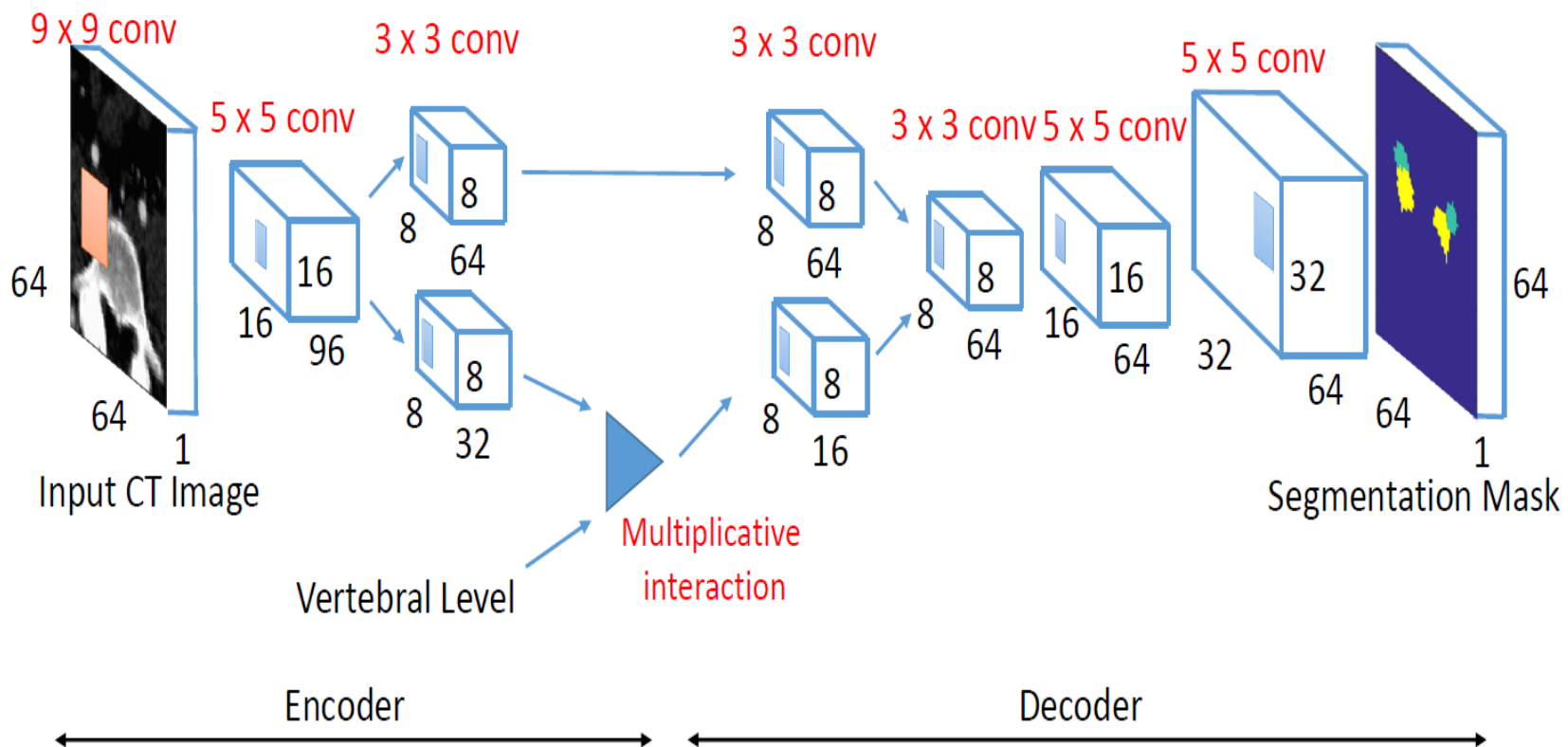
# Facial Recognition



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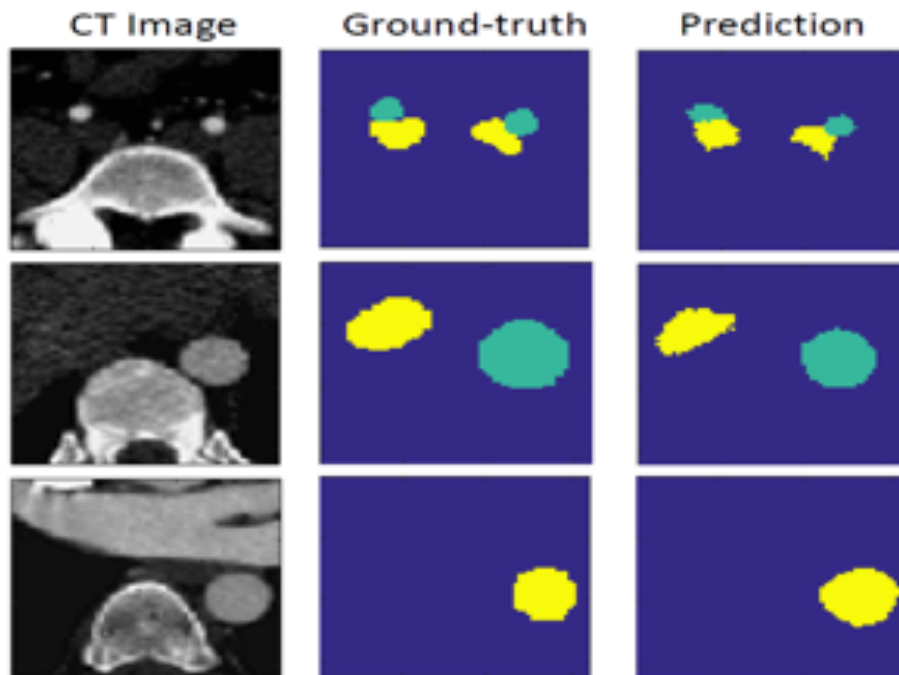
# Analytic morphomics convolutional neural networks (CNN)



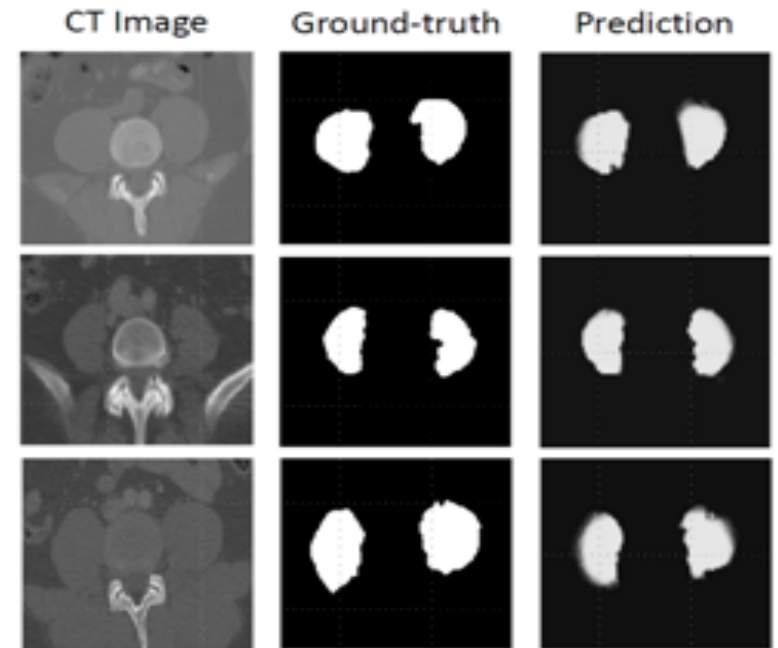
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# Machine Learning Results



Aorta and Vena Cava



Psoas